

# COMMERCIAL CAR JOURNAL

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The Commercial Car Journal



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April, 1931



1710

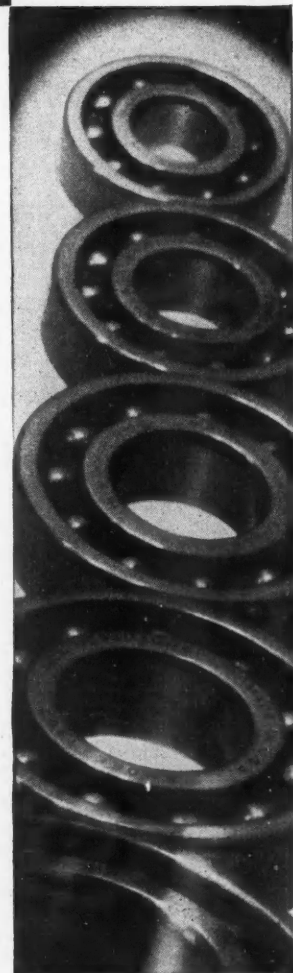
## Tough jobs are easy meat for New Departures

The high quality of New Departure Ball Bearings is generally conceded. Their ability to reduce friction, resist wear and spurn attention in millions of applications is well-known. † Yet, strange to say, there are still some who do not realize New Departure's capacity for heavy shock loads . . . for tremendous thrusts and radial loads as well. † Over 400 models of trucks attest to the endurance of New Departures in continuous heavy duty service . . . keeping the equipment out of the shop, and on the road. † New Departure's conspicuous success in many types of

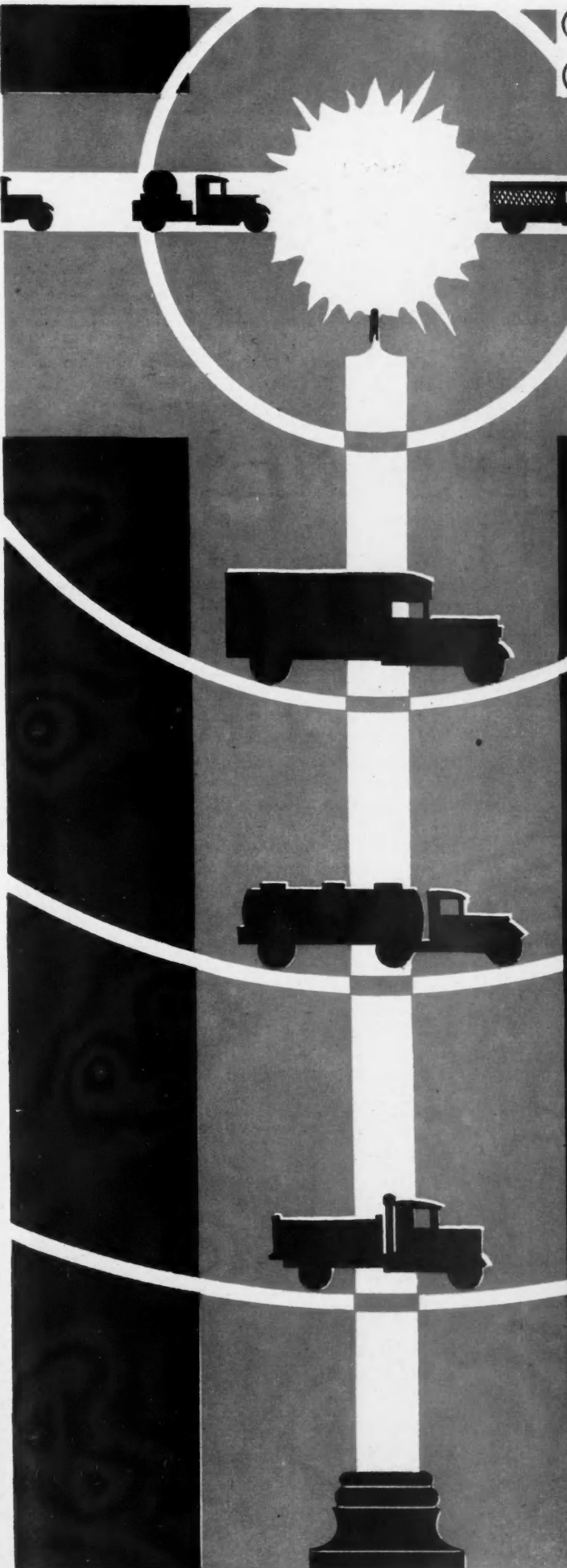
*machine tools* running under full load twenty-four hours a day where stresses are far beyond those ever met with in truck service, is impressive proof of the fact that New Departures are more than equal to any job that can be given them. † In short, the harder the task, the more you need New Departure Ball Bearings. The deeper a bearing lies in your truck — the costlier it is to get at, the more important it is to have a bearing that lasts as long as the mechanism, without a moment's attention for adjustment. How can New Departures do these things? Nothing rolls like a ball.

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# NEW DEPARTURE BALL BEARINGS







# COMMERCIAL CAR JOURNAL

## SPECIAL TRUCK EQUIPMENT ISSUE

APRIL

1931

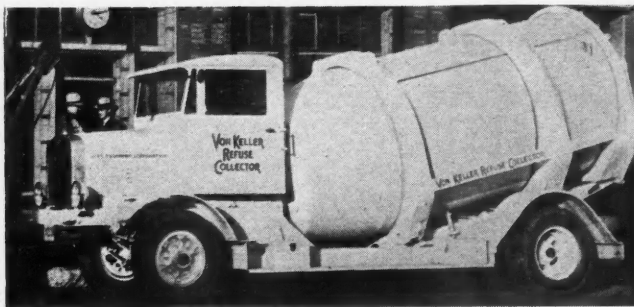
A year ago this publication adopted the special truck equipment idea—then already a lusty youngster—and announced that annually it proposed to devote an entire issue to recording the important events in its progress to maturity.

The obligations of foster parentage were assumed because of a realization that unless it were fitted with the proper equipment a truck chassis could not begin to realize fully its important function as an economical unit of transportation.

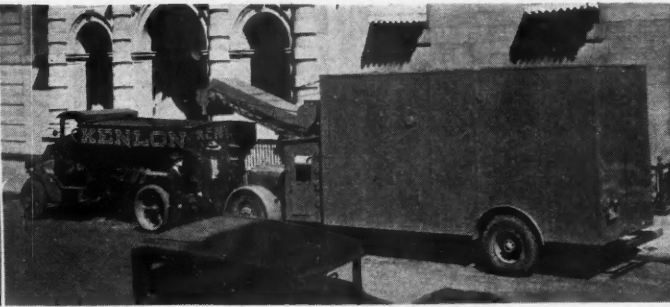
The acceptance by the industry of last April's inaugural Special Truck Equipment Issue, attested eloquently to the wisdom of fostering the idea.

Since then technical development in this field has been active despite the fact that in the sales end results have been below expectations. The progress that has been made is recorded in the pages of this second Special Truck Equipment Issue. Several divisions of truck transportation have displayed notable progress and it will be found that such divisions are accorded the consideration they merit.

The editors again are confident that with this issue they are furnishing readers a valuable catalog of special truck equipment and a reference work which can be used effectively in transportation buying and selling throughout the year.

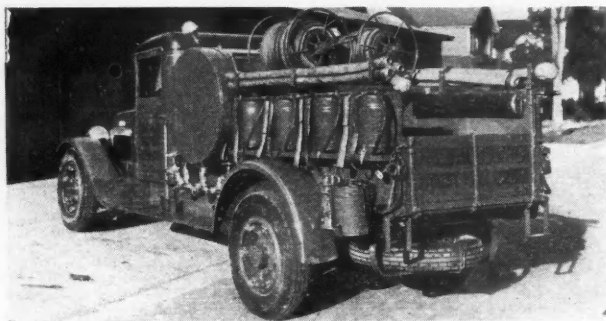


The trend toward sanitary refuse removal has stimulated the development of many special, in fact, unique bodies. The dust and odor proof collector illustrated embodies a drum which revolves slowly and by means of a fixed vane within the container, keeps the refuse trimmed automatically without aid of an attendant. When loaded the collector is elevated by a vertical hoist and discharged by reverse rotation. Rate, 10 tons



Demand for dustless removal of ashes from large buildings is responsible for this truck mounted electro-pneumatic suction system, which extends from the sidewalk directly to the ash pit. The equipment comprises an ash-handling truck containing a large hopper into which the ashes are drawn by suction, and from which they are conveyed by an enclosed belt-conveyor to a carrier truck. Electric generator furnishes power

## TAILORED BODIES FIT



Growing recognition by the states of the importance of protecting our forests against the ravages of fire has increased the demand for modern equipment. This fire fighter is fully equipped with water and chemical tanks, several hand extinguishers, hose, pumps, etc.



Bottlers insist on speed and good appearance. This triple-deck gives both. It permits easy handling with minimum effort on the part of drivers, presents a clean, orderly appearance and provides advertising space



LET'S see, I believe you'll need a few more inches at the waist," and your tailor runs his tape around your slowly swelling middle. "Right! Get this, Harry, 44. That's all, thank you. Call Friday."

Whatever your shape, good, bad or indifferent, come Friday, you don your new outfit and it fits. It fits like a glove. It was tailored to meet your precise needs.

Special bodies are built essentially in the same manner. To outfit an operator with correct transportation equipment involves consideration of specific needs, weights, sizes, appearance, etc. While these needs in many cases may be accommodated with standard stock bodies, the special character of some businesses demands the made-to-order fit.

The special bodies illustrated on these pages are only a few of the many tailored to exact dimensions and needs. Some operator wants armor for protection of

TURN TO PAGE 90, PLEASE

For additional photographs and bibliography of vocational special body requirements turn to page 84, please.

The hauling of light bulky materials requires special body provisions. Although varying in design to meet specific commodity sizes and shapes, bodies in this class have the common characteristic of large storing space. The job in the lower left corner designed for a warehouseman not only provides ample space within the express type body itself with its high tarpaulin top but utilizes a wool-rack over the hood and cab as well. Below is a special high rack body for hauling loads of hollow metal stampings





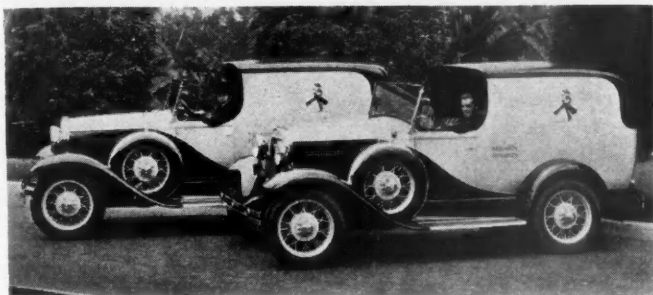


## SPECIAL BODIES

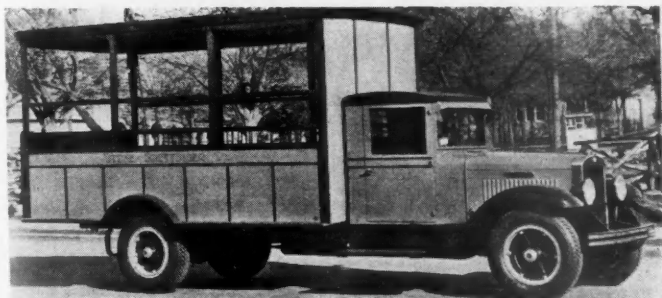
This queer-looking vehicle is not a mechanical ant-eater, as at first glance it appears to be, but only another type of apparatus for the dustless removal of ashes. Ashes are drawn pneumatically from basements at the rate of two cans per minute through a large rubber tube connected to the long metal snout of the machine and dropped into the closed hopper

# ANY NEED

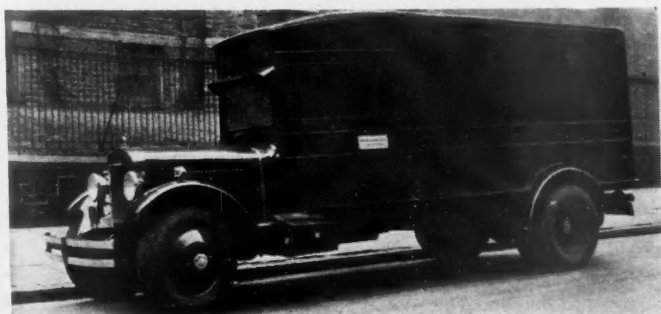
Retail establishments catering to selective groups and desiring to reflect the high-grade character of the business use de luxe delivery bodies. They must have graceful lines, embellishing glass and hardware and harmonious coloring, of which the town cars below are an example



Bodies used in the delivery of furniture are generally of the van type in capacities varying according to individual requirements. A departure from conventional design is the open job below, built for a Texas department store. The open sides may be closed by dropping roll curtains



"Believe it or not," here's an armored job designed expressly for the protection of the lowly nickel. In it 300,000,000 "jitneys" take a ride annually. Glass and steel are .45 calibre bullet proof. Windows give visibility



## Manufacturers

In almost every town of any size there is a body builder that can supply most of the special bodies described here. Physical limitations make it impossible to list the names of all such body builders. But below is a list of most of the larger companies located in the larger cities.

Aero-Simplex Body Co., 141 Baldwin St., Youngstown, Ohio  
 Aero-Car Co. of Detroit, 7424 Melville St., Detroit, Mich.  
 Allen Air Appliance Co., 452 Lexington Ave., New York City  
 American Armor Corp., 33 West 34th St., New York City  
 American Body Co., 5113 E. Grand Ave., Dallas, Texas  
 American Car & Foundry Co., 30 Church St., New York City  
 American Truck & Body Co., Martinsville, Va.  
 Anheuser-Busch, Inc., 9th & Arsenal Sts., St. Louis, Mo.  
 Areadia Truck Body Corp., 21 Murray St., Newark, N. Y.  
 Armstrong-Johnson Co., 97 N. Washington Ave., Columbus, Ohio  
 Atlas Body Works, 147 McKinley Ave., Bridgeport, Conn.  
 Auto Truck Equipment Co., 7501 Penn Ave., Pittsburgh, Pa.  
 Batavia Body Co., Batavia, Ill.  
 Beacon Body Co., 100 Walnut St., Somerville, Mass.  
 Beckert & Son, Pittsburgh, Pa.  
 Bender Body Co., W. 62nd & Denison Ave., Cleveland, Ohio  
 Born, Herman & Sons, 219 N. Fremont Ave., Baltimore, Md.  
 Brown Body Corp., 4917 Superior Ave., Cleveland, Ohio  
 Buffalo Commercial Body Co., 1255 Niagara St., Buffalo, N. Y.  
 Carl's Sons, Chas. W., Cole & Linwood Sts., Trenton, N. J.  
 Chandler Body Co., Shreveport, La.  
 Charlotte Wagon & Auto Co., Charlotte, N. C.  
 Clark, J. L. Mfg. Co., 519 High St., Oshkosh, Wis.  
 Clippinger, A. B. Mfg. Co., 1100 S. Mill St., Kansas City, Kansas  
 Crawford Auto Shop, Birmingham, Ala.  
 Davenport Body Co., 1507 Rockingham Road, Davenport, Iowa  
 Davis & Son, 209 W. Third St., Winona, Minn.  
 Defiance Co., Parry & Gorman Sts., Defiance, Ohio  
 DeKalb Wagon Co., 229 Garden St., DeKalb, Ill.  
 Diver-Detroit Corp., 16th & Merriek Ave., Detroit, Mich.  
 Dix Son & Co., 235 Poplar St., Memphis, Tenn.  
 Eagle Truck Body & Mfg. Co., Auburn, N. Y.  
 Eddystone Steel Co., Foot of Maddeck St., Crum Lynne, Pa.  
 Edwards Wheel & Body Works, Inc., Dallas, Texas  
 Erie Vehicle Co., 4529 S. State St., Chicago, Ill.  
 Expando Co., 120 S. LaSalle St., Chicago, Ill.  
 F & S Body Co., 3027 Commerce St., Dallas, Texas  
 Fitz Gibbon & Crisp, 467 Calhoun St., Trenton, N. J.  
 Fitzjohn Mfg. Co., Muskegon, Mich.  
 Fremont Metal Body Co., W. State St., Fremont, Ohio  
 General Body & Paint Co., 609 N. Main St., Fort Worth, Texas  
 Gilhool Body Works, 1227 Washington Ave., Scranton, Pa.  
 Gross & Gross Auto Works, 225 Seventh St., Salina, Kansas  
 Heil Co., 3001 W. Montana Ave., Milwaukee, Wis.  
 Hercules Products, Inc., Evansville, Ind.  
 Interboro Holst & Body Corp., Long Island City, N. Y.  
 Izett Auto Body Co., 1448 Speer Blvd., Denver, Colo.  
 Kaiser & Co., 23rd & Race Sts., Philadelphia, Pa.  
 Kentucky Wagon Mfg. Co., 3rd at Eastern Parkway, Louisville, Ky.  
 Kratzer Carriage Co., 100 S. First St., Des Moines, Iowa  
 Krauss Co. W. H., 3511 N. 13th St., Philadelphia, Pa.  
 Luce Mfg. Co., E. South St., Lansing, Mich.  
 McGarry Co., 1805 S. Ashland St., Chicago, Ill.  
 McKay Carriage Co., Erie Ave. & Center St., Grove City, Pa.  
 Martin Perry Corp., W. Market St., York, Pa.  
 Meyer Body Co., 218 Elm St., Buffalo, N. Y.  
 Mid-City Auto Body & Wagon Wks., 1500 W. Grand Ave., Chicago  
 Milflinburg Body Co., 101 Eighth Street, Milflinburg, Pa.  
 Montgomery Co., 2546 St. Louis St., New Orleans, La.  
 Montpelier Mfg. Co., Montpelier, Ohio  
 Motor Transit Co., 220 E. Market St., Los Angeles, Calif.  
 National Steel Products Co., 1611 Crystal, Kansas City, Mo.  
 Novelty Carriage Works, 815 Second Ave., Spokane, Wash.  
 Ohio Truck Body & Wagon Co., 3291 E. 65th St., Cleveland  
 Package Car Corp., Union Stock Yards, Chicago, Ill.  
 Paterson Vehicle Co., 27th St. & 19th Ave., Paterson, N. J.  
 Plymouth Body Works, Plymouth, Ind.  
 Proehl Body Corp., 3029 Calumet St., Chicago, Ill.  
 Providence Body Co., Providence, R. I.  
 R. B. Company, Kansas City, Mo.  
 Roeder Mfg. Co., 1392 Atlantic Ave., Brooklyn, N. Y.  
 Schaefer, Gustav, Co., 4180 Lorain Ave., Cleveland, Ohio  
 Schurmeier-Whitney Co., 419 N. Fifth St., Minneapolis, Minn.  
 Staley Co., 915 Eleventh Ave., Seattle, Wash.  
 Standard Steel Works, 16th & Howell Sts., Kansas City, Mo.  
 Steffen Body Co., 613 W. Seventh St., Sioux City, Iowa  
 Step-N-Drive Truck Corp., 1255 Niagara St., Buffalo, N. Y.  
 Stoughton Co., Stoughton, Wis.  
 St. Louis Car Co., 8000 N. Broadway, St. Louis, Mo.  
 Superior Body Co., E. Kibbey St. & Mandeville, Lima, Ohio  
 Thorne Motor Corp., 3231 W. Lake St., Chicago, Ill.  
 Truck Equipment Co., 1791 Fillmore Ave., Buffalo, N. Y.  
 Twin Coach Corp., Kent, Ohio  
 Utility Supply Co., Clintonville, Wis.  
 Waterloo Bodies, Inc., Waterloo, N. Y.  
 Wayne Works, 16th & No. F. St., Richmond, Ind.  
 Weatherproof Body Corp., 442 Shiawassee St., Corunna, Mich.  
 Weber & Co., 300 E. Main St., Louisville, Ky.  
 Weldmoech Steel Products Co., Hattiesburg, Miss.  
 Weibilt Body Co., 1400 E. Adam Road, Los Angeles, Calif.  
 Wentworth & Irwin, 327 Oregon St., Portland, Ore.  
 Whitfield & Sons, Inc., Champlin Ave., Penn Yan, N. Y.  
 Wood Hydraulic Holst & Body Co., 7924 Riepelle St., Detroit  
 Woodward Mfg. Corp., Austin, Texas  
 Yankee Motor Bodies Corp., 1224 East 9th St., Los Angeles  
 York-Hoover Body Corp., York, Pa.



## Refrigerator Body Builders

American Body Co., Inc., Dallas Texas  
 American Car & Foundry Co., 30 Church St.,  
 New York City  
 Amerio, P., Co., Inc., 318 Tenth Ave., N.Y.C.  
 Anheuser-Busch, Inc., St. Louis, Mo.  
 Auto Truck Equipment Co., Pittsburgh, Pa.  
 Batavia Body Co., Batavia, Ill.  
 Black, Adam, & Sons, Jersey City, N. J.  
 Born, Herman, & Sons, Baltimore, Md.  
 Butler Mfg. Co., Kansas City, Mo.  
 Caldwell, J. V., 466 11th St., San Diego, Cal.  
 Caley & Nash, Inc., Rochester, N. Y.  
 Carter Equipment Co., Kansas City, Mo.  
 Casale, John J., 511 W. 21st St., New York  
 Chapman Carriage Factory, Jacksonville, Fla.  
 Christie, Alex., & Co., Seattle, Wash.  
 Cope Company, Inc., Irvington, N. J.  
 Cruse-Crawford Mfg. Co., Birmingham, Ala.  
 Davis & Son, Winona, Minn.  
 Dix Son & Co., Memphis, Tenn.  
 Drayer & Hanson, Inc., Los Angeles, Cal.  
 Erby, Wm., & Sons Co., Chicago, Ill.  
 Ever-Ready Van Body Corp., Brooklyn, N. Y.  
 F & S Body Co., Dallas, Texas  
 Finnesey, Halliday, Barry & Bailey, Inc.,  
 Phila., Pa.  
 Fitz Gibbon & Crisp, Trenton, N. J.  
 General Body & Paint Co., Fort Worth, Tex.  
 Giffel Mfg. & Sales Co., Terre Haute, Ind.  
 Gray, R. H., Body Co., Austin, Minn.  
 Grothe, John J., Corp., Phila., Pa.  
 Hackney Bros. Body Co., Wilson, N. C.  
 Hercules Products, Inc., Evansville, Ind.  
 Hirn, Geo., Body Co., Brooklyn, N. Y.  
 Hoffman Body Co., Cleveland, Ohio  
 Kane Body Corp., Phila., Pa.  
 Kelly Auto Body Co., Cincinnati, Ohio  
 Kennedy Auto Works, Seattle, Wash.  
 Kentucky Wagon Mfg. Co., Louisville, Ky.  
 Klein Refrigerator Co., New York City  
 Kratzer Carriage Co., Des Moines, Iowa  
 Lange, H., Wagon Co., Pittsburgh, Pa.  
 LeBlond Schacht Truck Co., Cincinnati, Ohio  
 Liberty Auto Body Co., Brooklyn, N. Y.  
 Luce Mfg. Co., Lansing, Mich.  
 Maresmont Mfg. Co., Chicago, Ill.  
 Mayer Body Corp., Pittsburgh, Pa.  
 Meyer Body Co., Buffalo, N. Y.  
 Miller, A. C., Co., Atlanta, Ga.  
 Miller, Jas. Co., Minneapolis, Minn.  
 Motor Vehicle Refrigeration, Ltd., Oakland Cal.  
 Niederhut Carriage Co., Denver, Colo.  
 Oleson Commercial Body Works, Chicago, Ill.  
 Omaha Standard Body Works, Council Bluffs, Ia.  
 Pacific Car & Foundry Co., Seattle, Wash.  
 Perin-Walsh Co., Boston, Mass.  
 Plymouth Body Works, Inc., Plymouth, Ind.  
 Port Morris Body Co., 708 E. 135th St., N.Y.C.  
 Proctor-Keefe Body Co., Detroit, Mich.  
 Raum, J. C., & Sons, Baltimore, Md.  
 Reindl, Martin, & Sons, Brooklyn, N. Y.  
 Robbins & Burke, Inc., Cambridge, Mass.  
 Schaefer, Gustav, Co., Cleveland, Ohio  
 Schmidt, Chris., Detroit, Mich.  
 Schurmeier-Whitney Co., Minneapolis, Minn.  
 Shadbolt Mfg. Co., Brooklyn, N. Y.  
 Southern California Cab Co., Los Angeles, Cal.  
 Staley, Earl B., Co., Seattle, Wash.  
 Standard Steel Works, Kansas City, Mo.  
 Timpie Bros., Denver, Colo.  
 Truck Engineering Co., Fort Wayne, Ind.  
 Van Den Berg, J., & Sons, Hawthorne, N. J.  
 Warnsman Truck Body Co., Cleveland, Ohio  
 Weibull Body Co., Los Angeles, Cal.  
 Winter-Weiss Co., Denver, Colo.  
 Wood Bros., Oakland, Cal.  
 Yankee Motor Bodies Corp., Los Angeles, Cal.  
 York-Hoover Body Co., York, Pa.

## Prospects

Ice cream makers, dairies, beverage vendors,  
 frozen food distributors, packing and  
 slaughter houses, cheese, poultry and egg  
 dealers, fish merchants, florists, confection-  
 ers, bakers, freight carriers.

## Bibliography

For additional information on the subject of  
 refrigeration see the following articles:  
 Refrigerator Trucks Conquer the Desert, Oct.,  
 1929, page 17.  
 The Revolution in Refrigeration, Nov., 1929,  
 page 14.  
 Food Freezing Development May Revolutionize  
 Distribution, July, 1930, page 14.



# MORE VOCATIONS GO

## REFRIGERATION

THE remarkable progress achieved in refrigeration during the last few years has had and will continue to have a marked effect upon motor vehicle sales and transportation. Body builders have kept close pace with each new advance in the science of cooling and keeping cool, with the result that today refrigerator bodies have been developed to the point where their successful and economical operation is a proven fact, as attested by many prominent users throughout the country. So notable has been the work of the body builder that today the refrigerating facilities of truck bodies not only rival but surpass those of railroad refrigerator cars. Because of the rapidly increasing acceptance of the refrigerator body for preserving foods in delivery, a big market for such equipment is opening up. As a consequence, alert dealers and salesmen will want to accumulate sufficient knowledge on the subject to discuss it intelligently with potential users.

Modern refrigeration has not only improved and expanded the business of concerns formerly dependent on brine as a refrigerant, but has encouraged other vocations and, in fact, entirely new enterprises to turn to the portable "ice-box" for a solution of their distributing problems. The reason for this tremendous popularity is quite obvious. Perhaps in no other type of service must dependability of equipment be so certain as in the transportation of perishables. Such commodities must be handled quickly, yet economically. Operators can ill afford to

chance their loads to variations in temperature and delays and possible spoilage.

Use of the refrigerator body has been most spectacular in the ice-cream industry, where great things have been accomplished in recent years. But what is not generally known, though none the less startling, is its growing acceptance in several other lines of business. Frozen foods, innovated about two years ago, have resulted in the need of widespread distribution, both wholesale and retail. Frozen juices and parted fruits are other developments that will perhaps eventually require distributing facilities approximating those of morning milk delivery. Packing houses have eliminated cooling rooms by loading carcasses from slaughter houses directly into chilled truck bodies for immediate shipment to distant warehouses. Truck distribution of dairy products, poultry and eggs has been greatly extended from central points, some operators having broadened their activities to take in territories of more than 150 miles radius. The past year also has seen increased use of cold transportation by merchants in fish, flowers, candy and even baked goods. Cold cans as a substitute for water-ice has been made practical for distribution by modern refrigerator trucks. Even purely insulated jobs without refrigerant have come in for increased demand where

there is need for even cold or warm temperatures.

While refrigerator bodies vary in size, detail of construction, method of insulation, fixtures, refinements in design and appearance, there is one factor common to them all, and that is to keep outside heat from penetrating the interior. Jobs designed to do just that are known as insulated bodies, but when it is desired to reduce temperature inside the body by means of auxiliary equipment the body becomes a refrigerator. In bodies of this class any one of four methods of refrigeration is employed: mechanical refrigeration plant; solid carbon dioxide; chemical cans or brine. Each of these methods entails some change in the design of the body. Bodies mechanically refrigerated require the least change. This is particularly true when the cooling unit is mounted between the cab and the body, in which case there is only need for providing connections to the interior of the body for the coils and attaching them. Some body builders, however, build a special compartment for the refrigerating equipment in the front end of the body to give integral appearance.

The simplest requirement for adapting a body to the use of solid carbon dioxide is a container placed high in the body for housing the refrigerant. There are, however, other bodies specifically designed for the use of solid carbon dioxide. These are really two bodies, one built within

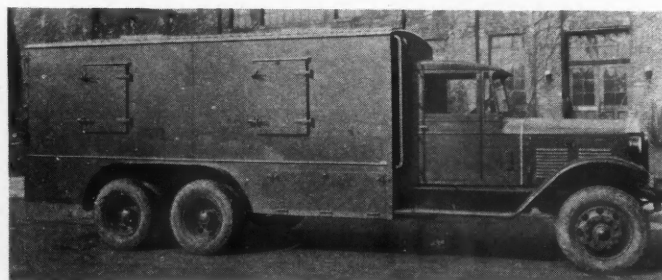
# FOR FRIGID BODIES





### Insulated (1)

Insulated bodies are being used to an increasing extent in vocations where extremes in temperatures are not essential but where maintenance of an even temperature is. Such bodies are generally built with two walls, an insulant between and fitted with tight-fitting refrigerator doors.



April, 1931

### Refrigerator Body Equipment Makers

- a—Armstrong Cork & Insulation Co., Lancaster, Pa.
  - b—Balsa Wood Co., Inc., Brooklyn
  - c—Body Equipment Co., Cincinnati
  - e—Cleveland Hardware Co., Cleveland, Ohio
  - c—Consolidated Soda Fountain Corp., Greenville, Mich.
  - a—Cork Import Corp., 345-49 W. 40th St., New York
  - e—Delaney Chemical Co., 260 S. Broad St., Phila., Pa.
  - c—Drylee Corp. of America, 52 Vanderbilt Ave., New York
  - a—Dry Zero Corp., 130 N. Wells St., Chicago
  - d—Frigidaire Corp., Dayton, Ohio
  - e—Glacier Systems, Inc., 243 W. Broadway, New York
  - e—Hanson, A. L., Mfg. Co., 5037 Ravenswood Ave., Chicago
  - b—Haskelite Mfg. Corp., 120 S. LaSalle St., Chicago
  - a—Heinig Body Shops, 1464-74 Webster Ave., Chicago
  - d—Hercules Products, Inc., Servel Div., Evansville, Ind.
  - e—Illinois Stamping & Mfg. Co., Chicago
  - d—Kelvinator Corp., Detroit, Mich.
  - b—Met-L-Wood Corp., 6751 W. 65th St., Chicago
  - b—Pantason Co., Inc., 250 Park Ave., New York
  - c—Solid Carbonic Co., Ltd., 122 East 42nd St., New York
  - f—Thompson & Jameson Corp., 360 W. Superior St., Chicago
  - a—United Cork Companies, Lyndhurst, N. J.
  - c—Waltham Systems, Inc., Buffalo, N. Y.
  - a—Wilson & Company, Inc., 42nd St. & So. Ashland Ave., Chicago
  - a—Wood Conversion Co., Cloquet, Minn.
- A—Insulation. B—Panels. C—Refrigerants. D—Power Units. E—Hardware. F—Generator.

the other, the two being separated by narrow strips that form a duct space in which the evaporating gas circulates. The gas passes through an outlet slot in a high mounted carbon dioxide chamber and being heavier than air descends a side-wall duct space to the bottom. As it warms the gas rises between other walls and returns to the chamber by means of a cross-shaped duct.

Chemical cans, the latest refrigerant in the field, which is discussed in greater detail later in this article, necessitate but few alterations in the conventional insulated body and in some cases none at all. The simplest adaptation is provision of hooks along the inside walls of the body upon which flat cans may be hung. The more common method is to build a special compartment over each cold vault to accommodate a pre-determined number of cans. Separate doors permit access to these compartments. Operators furnishing chemical cans to retailers as a substitute for brine require an extra compartment for this cabinet service.

Bodies equipped for the accommodation of brine as a refrigerant carry ice and salt hoppers with or without a system of coils. These hoppers are generally filled from the roof and are furnished with tight-fitting covers. Pipes leading to points below the chassis frame keep the hoppers drained. Where salt and ice service is furnished retailers, a special section for this supply must be provided and is generally built in the rear of the body. One side of these sections is generally fitted with folding gates for lowering as the ice supply is reduced.

There are two types of mechanical refrigerator units available: those operated by an independent

### Dry-Ice (2, 3, 4, 5)

A feature of this refrigerant is its lightness and the fact that relatively little space is required to store it, which makes larger pay-loads possible and simplifies loading. Bodies designed for its use either provide for the free circulation of the gas evaporating from the refrigerant or confine it from the refrigerating compartment by causing it to circulate through sealed ducts or passageways. In other respects the design of the body, number of compartments, doors, etc., vary according to individual needs.

The Commercial Car Journal



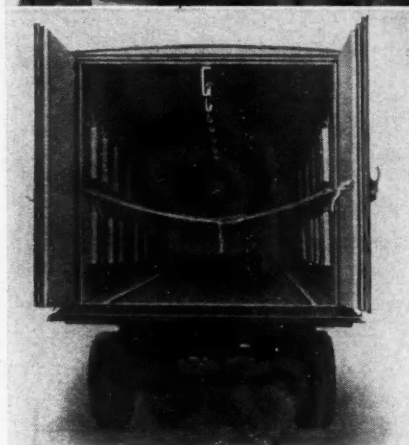
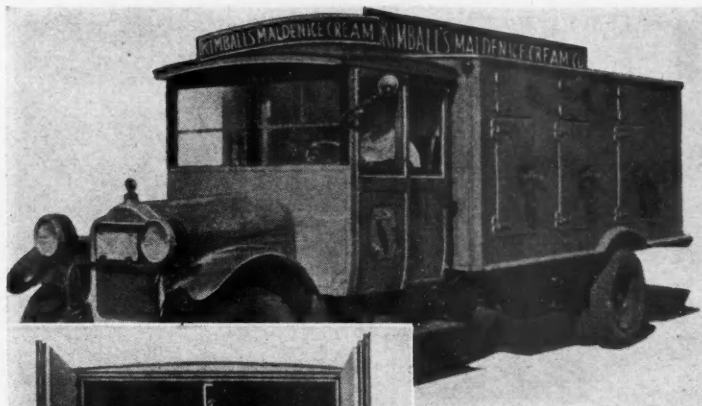
## REFRIGERATION

### Chemicals (6, 7)

Chemical cans are containers filled with a liquid refrigerant and hermetically sealed. They are "frozen" in hardening rooms and radiate "cold" from 24 to 48 hours. The cans are inserted in compartments built over the cold vaults (Fig. 6) and are replaceable after they have lost their cooling ability. In some vocations it is desirable to cool the storage space direct (Fig. 7)

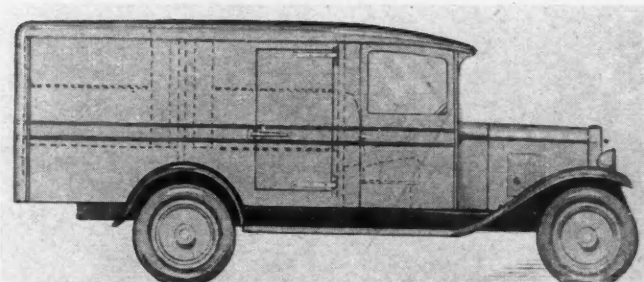
### Brine (8, 9)

Bodies refrigerated by crushed ice and salt have tanks, usually accessible from the top, with or without a system of coils. Fig. 8 is a brine cooled job having two tanks filled from the same hatch and two cold compartments. In Fig. 9 cracked ice, loaded through top hatches, covers the entire top and fills side walls.



7

6



9



power plant and those run from power derived from the truck engine. The majority of the latter convert the mechanical energy into electrical energy by means of a generator. The independent unit, which includes a gasoline engine, permits operation of the refrigerating unit irrespective of the truck engine. Electrical systems also may be operated continuously, but while on the road they depend entirely on the truck engine. In the garage power may be obtained by plugging in on house current. Mechanical systems consist of compressors operated either by gasoline engine or generator and a set of coils equipped with expansion valves and thermostats for automatic control of temperature. To stabilize electric current generated by truck engines running at various speeds generators are furnished which produce constant voltage regardless of engine speed.

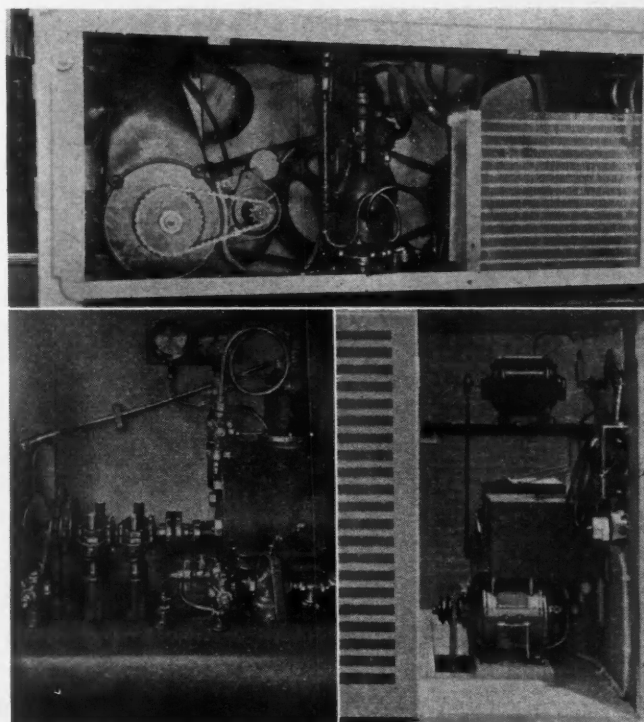
Chemical can refrigeration is a system of cooling which eliminates the use of ice and salt in delivery and in retailers' cabinets. The system includes containers known as cans, cartridges, slugs, etc., which contain a chemical compound hermetically sealed. These containers are "frozen" in hardening rooms, after which they "radiate" cold for periods of 24 to 48 hours. Bodies using the system are divided into separate compartments, each a separate unit, and designed to accommodate a certain number of con-

TURN TO PAGE 88, PLEASE

### Refrigerating Units (10)

Refrigerating units derive their power either from an independent power-plant or from the truck engine through a power take-off. Fig. 10, top, is a view of an independent outfit. The engine is at the left and the compressor at the right. Fig. 10, left, shows a high speed compressor, which takes its power directly from the truck transmission. Fig. 10, right, shows a variable speed generator hooked between the take-off and unit motor. It produces a constant voltage, regardless of truck engine speed.

10



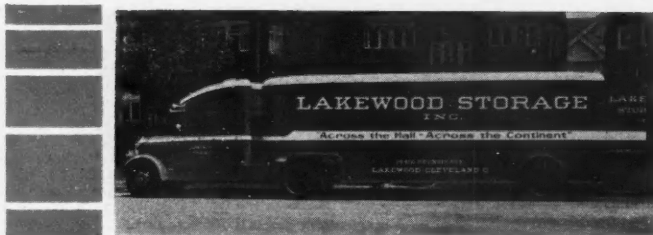
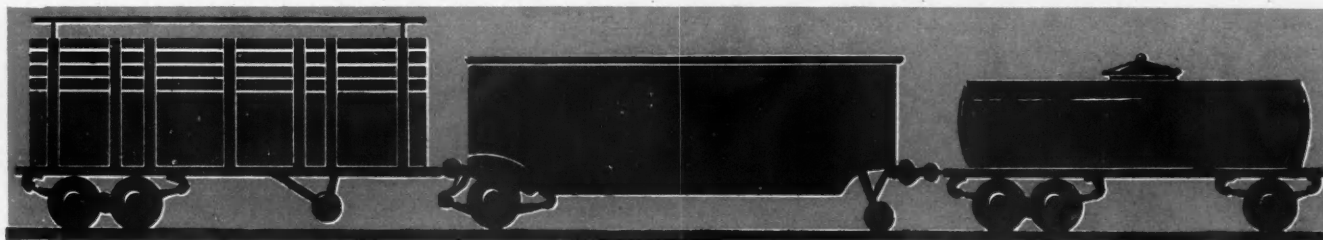


Fig. 1—A van type semi-trailer with rounded front end to give appearance of single vehicle



Fig. 2—Four-wheel trailers with tank bodies are used to increase capacity of tank truck units



## Manufacturers

Auto-Kamp Trailer Co., Saginaw, Mich.  
 B & J Trailer Co., Elkhart, Ind.  
 Bower Mfg. Co., Fowler, Ind.  
 Carter Mfg. Co., Memphis, Tenn.  
 Clare Mfg. Co., Clare, Mich.  
 Defiance Co., Defiance, Ohio.  
 Detroit Trailer & Machine Co., Detroit.  
 Edwards Iron Works, Inc., South Bend, Ind.  
 Electric Wheel Co., Quincy, Ill.  
 Fruehauf Trailer Co., Detroit.  
 General Motors Truck Co., Pontiac, Mich.  
 Hesse Mfg. Co., Leavenworth, Kan.  
 Hewitt-Ludlow Auto Co., San Francisco.  
 Highway Trailer Co., Edgerton, Wis.  
 Hobbs Mfg. Co., Fort Worth, Texas.  
 Howard Transportation Co., Los Angeles.  
 Hvass, Chas., & Co., Inc., 508 E. 19th St., N. Y. C.  
 Kentucky Wagon Mfg. Co., Louisville, Ky.  
 Kingham Trailer Co., Inc., Louisville, Ky.  
 Lee Trailer & Body Co., Plymouth, Ind.  
 Mack Motors, Inc., 25 Broadway, New York.  
 May Trailers, Inc., Shreveport, La.  
 Mechanical Handling Systems, Detroit.  
 Muskogee Iron Works, Muskogee, Okla.  
 Nabors, W. C. Co., Mansfield, La.  
 New Comer Trailer Mfg. Co., Los Angeles.  
 Omaha Steel Works, Omaha, Neb.  
 Patriot Mfg. Co., Havelock, Neb.  
 Reedy Auto-Truck & Trailer Co., Tulsa, Okla.  
 Reliance Trailer & Truck Co., San Francisco.  
 Rogers Bros. Corp., Albion, Penna.  
 Schaefer, Gustav, Co., Cleveland.  
 Spokely, Guy G., Inc., Canby, Minn.  
 Springfield Wagon & Trailer, Springfield, Mo.  
 Texas Body & Trailer Co., Houston, Texas.  
 Trailmobile Co., Cincinnati, Ohio.  
 Troy Trailer & Wagon Co., Troy, Ohio.  
 Utility Trailer Mfg. Co., Los Angeles.  
 Wentworth & Irwin, Portland, Ore.  
 Whitehead & Kales Co., River Rouge, Mich.

## Prospects

For semi-trailers and four-wheel trailers; practically all vocations. Pole trailers: contractors, pipe lines, public utilities, riggers, saw mills, lumbermen. Low-bed trailers: general contractors, haulers, riggers, road builders, power shovel and crane operators, steel erectors.

## Bibliography

For additional information on the subject of trailers see the following articles:  
 Getting Actual Trailer Cost, June, 1929, page 26.  
 Truck Trailers Help Shippers, Oct., 1929, page 30.  
 Semi-Trailers Cut Gas Trucking Costs, Feb., 1930, page 18.  
 Trailer is Truck's Transportation Ally, April, 1930, page 26.  
 Railroad Ferries Trailers on Long Haul, Feb., 1931, page 22.

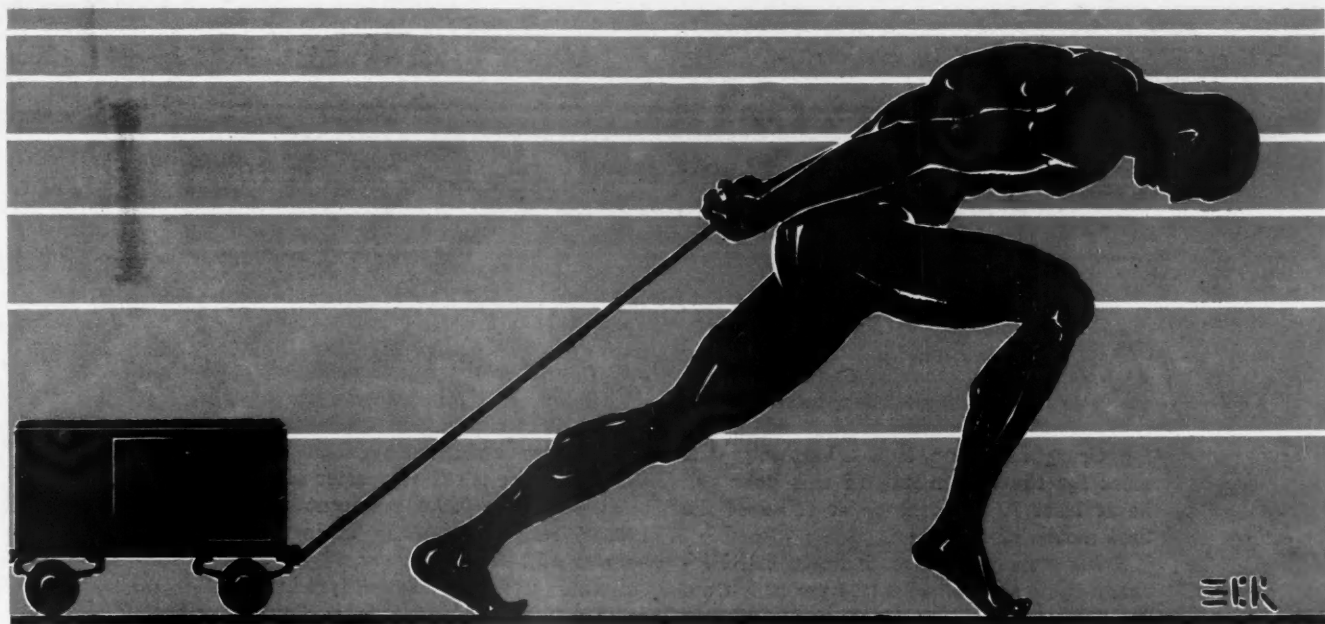
# TRAILERS

TRAILERS have won their way to complete acceptance in the brotherhood of highway freight vehicles if recent happenings have been properly interpreted. Truck manufacturers in increasing numbers have recognized trailers in the very practical fashion of building tractor-trucks models to haul them. Evidence of this acceptance is at hand in the growing list of tractor-trucks listed in *COMMERCIAL CAR JOURNAL* specifications.

A few manufacturers have gone still further and added trailers to their lines. Mack, it will be remembered, has been making heavy-duty trailers for some time. General Motors Truck Co. is introducing a full line of trailers offered not only for trucks of its own manufacture but for trucks of all makes. It is no secret that other prominent makers of trucks are preparing to launch lines of trailers.

Trailers won their way with truck merchants and fleet owners because they have proved profitable in a wide variety of services. Like the late Lon Chaney, trailers appear in many different roles, seemingly entirely different, but actually having a hidden likeness. No longer are they restricted to carrying loads beyond the strength of a truck or the legal weight limits on four wheels. They carry light loads, bring order to shipping platforms, reduce handling and cut hauling costs.

Saving time of the power unit during loading and unloading is one of the common services of trailers—in fact, it is the one which many think of first. In operations where loading and unloading times are



# BEAT TRAIL TO ECONOMY

long and trips are short, bodies which are loading spaces are placed upon semi-trailers and spotted along loading platforms. A tractor unit coupled to a loaded semi-trailer takes it to destination, uncouples, couples to an unloaded semi-trailer and goes back to the loading point.

Freight coming to a given loading platform may be destined for many points rather than one point. In this type of service, rows of semi-trailers are placed along the loading and the bodies on the semi-trailers become, in effect, bins into which freight is sorted. As soon as a semi-trailer body is filled, it is taken away by a tractor unit and an empty semi-trailer put in its place. This set-up saves a lot of time and labor in handling freight on a shipping platform because packages can be taken directly from the factory or warehouse, in which the loading platform is located, to the trailer body. It would be impracticable to hold up as many trucks as there are semi-trailers and the

TURN TO PAGE 60, PLEASE

Fig. 3—A large load of gasoline carried on six-wheel tractor and long four-wheel semi-trailer



Fig. 4—Two freight bodies on six-wheel units, the first tractor and semi-trailer, second a six-wheel trailer







## THE TRUCK INDUSTRY— FIGURATIVELY SPEAKING



**A**LTHOUGH January registration figures are still incomplete because Georgia's revision of its registration system is delaying Georgia's report, it is a certainty that sales for the first month of this year will be at least 19 per cent under those of the first month of last year.

Returns from 40 states indicate that February sales were off about 24 per cent from the February, 1931, total. It appears likely that February will share with last November

and December the questionable distinction of having been the worst truck selling months of the so-called 1930 depression.

Estimates built up by this publication show sales for the first quarter of 1931 will total 81,000, or 22.2 per cent under the 104,305 sold domestically during the first quarter of 1931.

Similar estimates reveal production for same period will be 21 per cent under and foreign sales will be 27.2 per cent under.

### Domestic New Truck Registrations by Makes and Months

	Autocar	Brookway-Indiana	Chevrolet	Diamond T	Dodge	Fageol	Fargo	Federal	Ford	G. M. C.	International	LaFrance-Republic	Mack	Morland	Paige	Pierce-Arrow	Relay	Reo	Rugby	Schacht	Sterling	Stewart	Studebaker	White	Willys-Overland	Total Sales Including Miscellaneous
January.....1931	223	152	7,436	167	1,173	23	30	109	11,051	443	1,306	28	225	16	27	3	13	267	32	15	62	84	297	219	155	23,665
January.....1930	160	249	8,754	242	1,608	41	186	169	13,233	727	1,835	43	345	51	14	4	28	698	90	21	145	97	104	413	440	30,241

\*Georgia figures not included in total.

### New Truck Registrations for 40 States in February, 1931

FEBRUARY		1931	1930	FEBRUARY		1931	1930
Alabama	.....	201	559	Nevada	.....	38	43
Arizona	.....	107	168	New Hampshire	.....	143	75
Arkansas	.....	267	268	New Jersey	.....	750	1,000
California	.....	1,475	1,763	New Mexico	.....	113	86
Connecticut	.....	286	365	North Carolina	.....	370	452
Delaware	.....	59	96	North Dakota	.....	89	123
District of Columbia	.....	112	75	Ohio	.....	1,021	1,224
Florida	.....	389	755	Oregon	.....	248	331
Idaho	.....	99	105	Pennsylvania	.....	1,478	1,872
Illinois	.....	1,431	2,177	Rhode Island	.....	134	127
Indiana	.....	684	1,221	South Carolina	.....	237	230
Iowa	.....	790	652	South Dakota	.....	225	312
Kentucky	.....	373	655	Texas	.....	1,234	2,370
Maine	.....	226	159	Utah	.....	156	109
Maryland	.....	298	452	Vermont	.....	75	80
Massachusetts	.....	708	660	Virginia	.....	863	816
Minnesota	.....	296	536	Washington	.....	323	341
Missouri	.....	1,795	2,234	West Virginia	.....	216	267
Montana	.....	151	231	Wisconsin	.....	452	748
Nebraska	.....	470	619	Wyoming	.....	95	92
Totals—40 States		18,477	24,498				

	Truck Production (†)		Foreign Truck Sales (‡)	
	1931	1930	1931	1930
January	33,521	38,557*	11,493	20,289
February	39,975	51,087	11,742*	14,015
March	50,000*	66,555	15,700*	19,142
April	.....	71,238	.....	22,721
May	.....	58,496	.....	21,733
June	.....	48,458	.....	15,412
July	.....	42,099	.....	12,611
August	.....	41,209	.....	13,268
September	.....	44,301	.....	13,321
October	.....	39,678	.....	10,868
November	.....	34,667	.....	12,065
December	.....	32,930	.....	11,264
Totals	123,496*	569,275	38,935*	186,702

\*Estimate.

†(United States and Canada.)

‡(Comprise Exports, Foreign Assemblies and Canadian Production.)

NAME OF VOCATION OR BUSINESS	Number of Trucks Registered as of Jan. 1, 1930.	BODIES												SPECIAL EQUIPMENT										BUYING TIME			
		Spec. Vocational	Concrete	Dump	Express	Insulated	Refrigerator	Panel	Platform	Rack	Sleeper Cabs	Stake	Van	Compressors	Derricks	Earth Boreers	Extra Axles	Hoists	House to House Vehicles	Pumps	Tanks	Trailers	Trench Diggers	Winches	Start Canvass	Get Busy	Peak Month
Automotive Service and Access...	182,000	(X)			(X)			(X)							(X)		(X)		(X)					(X)	{ Mar. June Jan.	{ April. July Feb.	{ May Aug. Mar.
Bakers Retail and Wholesale...	88,500	(X)																	(X)			(X)		{ Aug. Dec.	{ Sept. Jan.	{ Mar. Oct.	
Bottlers.....	41,150	(X)																	(X)				(X)	{ Nov. Dec.	{ Dec. Jan.	{ Feb. May	
Building Material & Supplies...	48,920	(X)																	(X)				(X)	{ Jan. Feb.	{ Jan. May	{ Feb. Oct.	
Contractors, General.....	194,500	(X)																	(X)				(X)	{ Mar. Aug.	{ Sept. July	{ May Oct.	
Creameries and Dairies.....	88,405	(X)																	(X)				(X)	{ Jan. Feb.	{ Jan. May	{ Feb. Oct.	
Department Stores and Retail...	53,710																		(X)				(X)	{ June	{ June	{ Aug.	
Farms.....	767,200																		(X)				(X)	{ May Oct.	{ July	{ Aug.	
Fuel, Coal, Coke, Wood.....	77,750	(X)																	(X)				(X)	{ June	{ July	{ Aug.	
Furniture, Retail, Wholesale and Moving.....	88,050	(X)																	(X)				(X)	{ May Aug.	{ Sept.	{ Oct.	
Gasoline and Oil.....	129,000	(X)																	(X)				(X)	{ Mar. Nov.	{ Dec. Jan.	{ May Aug.	
Grocers and Food Products.....	343,950																		(X)				(X)	{ Jan. Feb.	{ Aug.	{ Sept.	
Hardware, Retail and Wholesale. Ice Cream, Delivery.....	83,750 (C)	(X)																	(X)				(X)	{ Jan. Feb.	{ Aug.	{ Sept.	
Laundries, Cleaners and Dyers...	84,700	(X)																	(X)				(X)	{ Jan. Feb.	{ Aug.	{ Sept.	
Lumber, Logging, Millwork.....	118,800	(X)																	(X)				(X)	{ Jan. Feb.	{ Aug.	{ Sept.	
Meat and Meat Products.....	93,450	(X)																	(X)				(X)	{ Jan. Feb.	{ Aug.	{ Sept.	
Municipalities.....	81,300	(A)																	(X)				(X)	{ Oct.	{ Nov.	{ Dec.	
Plumbing and Heating.....	75,100	(X)																	(X)				(X)	{ Jan. June	{ May Nov.	{ Dec. Jan.	
Produce, Retail and Wholesale...	50,350	(X)																	(X)				(X)	{ Oct.	{ Nov.	{ Dec.	
Public Utilities.....	53,200	(X)																	(X)				(X)	{ Jan.	{ Feb.	{ Mar.	
Road Work.....	12,550	(B)																	(X)				(X)	{ Dec. Jan.	{ Jan. Feb.	{ Sept.	
Trucking and Warehousing.....	177,400																		(X)				(X)	{ Aug.	{ Sept.	{ Oct.	

## Vocational Chart of Equipment Needs

Plotting of types of special truck equipment needed by each of 23 major vocations, in the accompanying table, is intended to serve two purposes. In general, it shows how widespread is the dependence upon trucks to render service suited to individual needs. Part of this service is outside the field of transportation, much of it is unusual transportation.

In particular, the table tells what special equipment is required by each vocation and when purchasing reaches a peak. Obviously no buying chart is of universal application. Seasons throughout the country, and abroad, change peak buying periods. The table will, however, serve as a guide for selling and for buying.

## Index of Special Equipment Manufacturers Carried in This Issue

Air compressors...	56	House to house...	32
Aluminum bodies...	24	Lifting and pulling...	56
Cabs...	28	Livestock...	56
Concrete bodies...	35	Pumps...	56
Dumps...	39	Refrigerator bodies...	16
Earth axles...	56	Road work...	45
Extra axles...	53	Special bodies...	15
Haul for hire...	41	Tanks...	49
Hoists...	47	Trailers...	20

## Reference Notes

(A) Additional equipment used by municipalities not listed in columns includes: Scrapers, snow plows, flushers, sweepers, sand and chip spreaders, road magnets, built-in dozers, bituminous and oil spreaders. for this (C) Trucks for this service are included in creameries and dairies.

# ALUMINUM PAYS IN WEIGHT IT SAVES



WHEN a stock salesman sallies forth into the land offering an investment on which he promises a return of 100 per cent a year, he soon attracts the attention of the credulous and the police. But there are plenty of salesmen offering "your money back within a year" propositions who are welcome in offices of keen business men and have no fear of cops except when they run by traffic lights.

The salesmen who enjoy these unusual privileges are wide-awake sellers of motor trucks who take full advantage of their opportunities to capitalize upon the profit-making quality of aluminum and its alloys as body-making materials.

Aluminum bodies are new, most of them being less than two years old, but operating experience already available shows that many of these

bodies are earning profits which make get-rich-quick schemes seem tame. Profits on the extra investment involved in use of aluminum rather than conventional bodies, shown in the accompanying table, run up to several hundred percent a year.

Gain from use of aluminum bodies comes from an increase in payload or a decrease in operating costs; in some instances, both. Where an operation calls for handling large quantities of freight over the highways, an increase in payload gives a corresponding increase in gross earnings of trucks. If operating conditions are not favorable to the carrying of an increased payload, it is obvious that the same load can be carried at less cost or at a higher rate of speed.

Saving in weight brought about by the use of aluminum alloy in truck body construction goes on whether the truck is loaded or empty. Very little attention has been given to this fact, but it is nevertheless important because a large percentage of trucks carry loads in one direction on a trip and come back to the starting point empty.

Every pound of body weight is a loss of one pound in carrying capacity of a truck. This fact is just as

## Manufacturers

Aluminum alloys for body building are manufactured by the Aluminum Co. of America, Pittsburgh. The company has available engineering data and advice about construction of truck bodies and names of body builders in any locality qualified to make bodies of this material.

Among the body builders throughout the country who have constructed aluminum alloy bodies are:

Auto Truck Equipment Co., Pittsburgh  
A & R R Iron Works, Brooklyn, N. Y.  
Davis Welding & Mfg. Co., Cincinnati, Ohio  
Fitz Gibbon & Crisp, Trenton, N. J.  
Heil Co., Milwaukee, Wis.  
Herman Body Co., St. Louis, Mo.  
Highway Trailer Co., Edgerton, Wis.  
H. Kaiser & Co., Philadelphia, Pa.  
Kranz Auto Body Co., St. Louis, Mo.  
Mayer Body Corp., Pittsburgh, Pa.  
McCabe-Powers Auto Body Co., St. Louis, Mo.  
N. P. Nelson Iron Works, Passaic, N. J.  
Louis A. Pierotto Co., Oakland, Calif.  
Providence Body Co., Providence, R. I.  
Schaefer, Gustav, Co., Cleveland  
Standard Steel Works, North Kansas City, Mo.  
Wangler Co., Pittsburgh  
Yankee Motor Bodies, Los Angeles, Calif.

## Prospects

All vocations.

Fig. 1. Two long van-type bodies built of aluminum alloy mounted on 6-wheel Nelson-LeMoon chassis



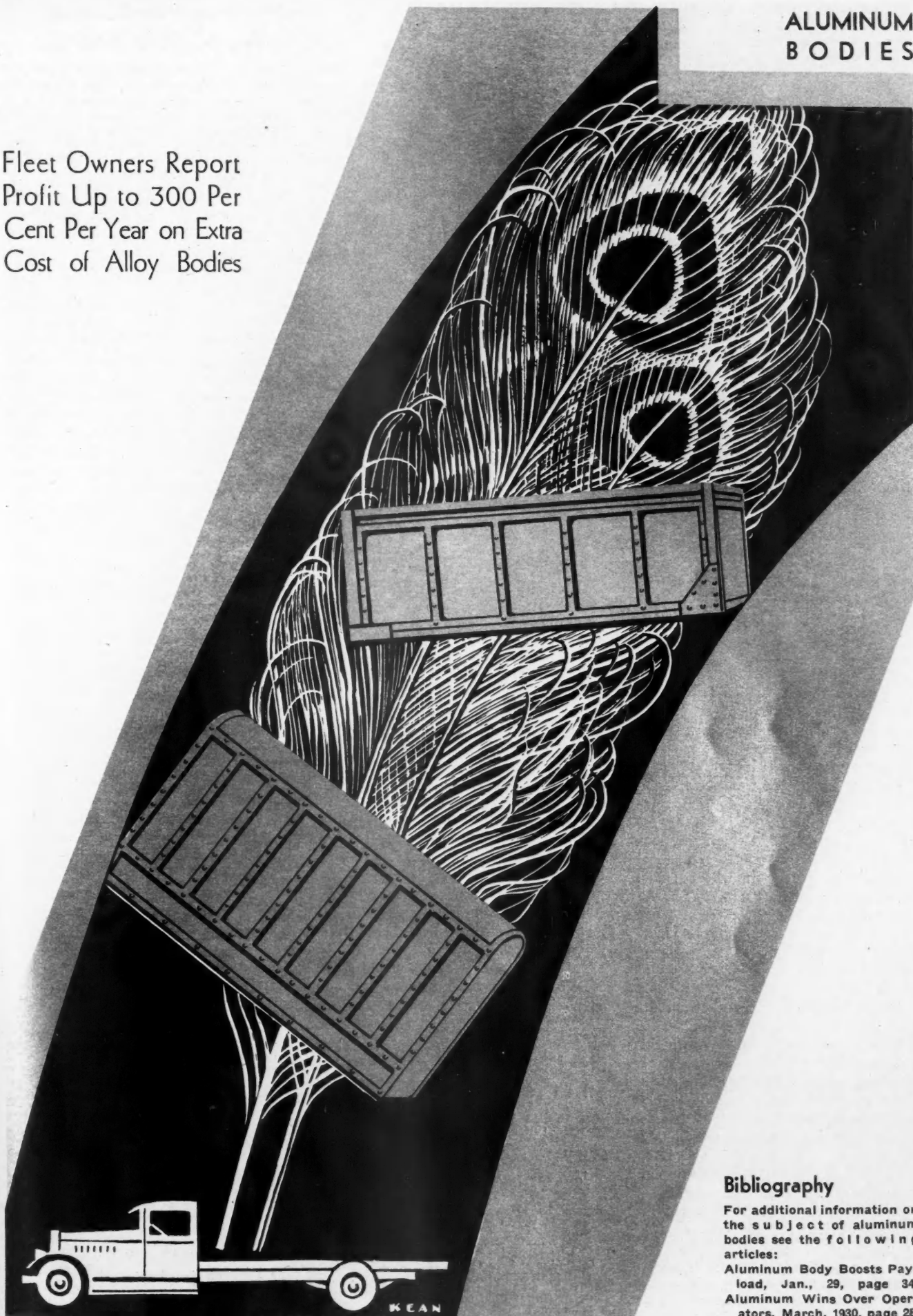
Fig. 2. Extra cost of this aluminum body was written off in one year by carrying one ton extra payload





## ALUMINUM BODIES

Fleet Owners Report  
Profit Up to 300 Per  
Cent Per Year on Extra  
Cost of Alloy Bodies



### Bibliography

For additional information on the subject of aluminum bodies see the following articles:

Aluminum Body Boosts Payload, Jan., 29, page 34.  
Aluminum Wins Over Operators, March, 1930, page 28.

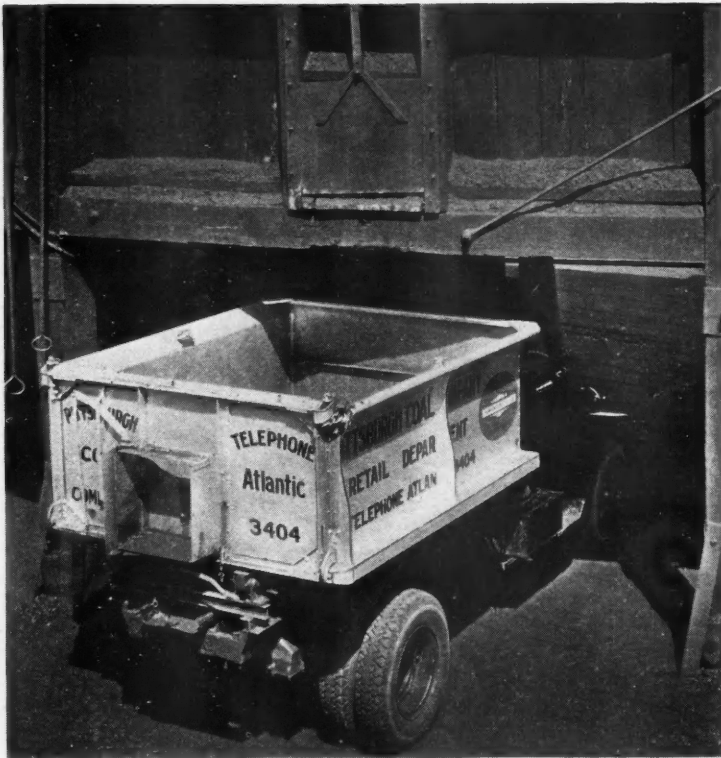


Fig. 3. This aluminum coal body, built in 1928, has withstood impact of loads dropped six feet from overhead bin

obvious as that two plus two equals four but its significance was not as fully realized a number of years ago as it is today. One of the reasons for giving more attention to weight of bodies is the activity of state legislatures in their effort to guard investments in improved roads by establishing rigid, and in many instances arbitrary, limits on total vehicle weight or on wheel loads. When a legislature sets a definite limit, such as 26,000 lb. for a four-wheel vehicle, it takes no mathematician to figure out that a chassis of excessive weight or a heavy body is out of place.

Another equally obvious fact is likewise being more fully recognized. This is that it costs money to move weight over the highways and that operating costs can be reduced by cutting down gross weight of truck and body. If an aluminum body weighs 1000 lb. less than a steel, or a steel and wood, body and no increase in payload is desired, the body and load can be carried upon a chassis of less rated capacity.

In many instances, an increase in carrying capacity of the vehicle may be very desirable, even though its total gross weight is but a fraction of a maximum permitted under state laws. In the highly competitive 1-ton

and 1½-ton truck groups, a considerable increase in load-carrying ability is achieved by the use of light weight bodies. This saving may be of particular value when bulky products are to be hauled, requiring bodies of large cubic capacities to contain the necessary load.

Analysis of any given truck operation will show the benefits which may be obtained by the use of aluminum alloy bodies and the benefits can be valued in dollars of increased income or decreased operating costs. Careful fleet operators before undertaking large investments wish to know just how large the investment will be and how long the bodies will last. Difference in cost between a body built of aluminum alloy and one built of steel or steel and wood can easily be determined accurately. The cost of

## A motor truck manufacturer approves aluminum bodies

The aluminum truck body is new. The modern truck merchant can secure an important advantage by being thoroughly familiar with the possibilities of its employment by his prospects. He should find out from the body builders of his territory as to just what they can do in this respect and give careful consideration to the relative merits and cost of aluminum construction in making recommendations for new truck installations.—Diamond T Motor Car Co., Chicago, Ill.

building an aluminum body of the usual type differs little from that of a steel body. The aluminum alloy costs from 28 cents to about 45 cents a pound compared with 3 cents to 6 cents a pound for steel. Steel, being three times as heavy as aluminum, the corresponding cost of pieces the same size as aluminum is about 9 cents to 18 cents per pound.

Commercial application of the strong alloys of aluminum as truck body material covers a period of little more than two years. This period is rather short in which to determine how long an aluminum alloy body will last. However, there are a few bodies, subjected to hard usage, for which definite operating records are available.

In the fall of 1928, Pittsburgh Coal Co. purchased from the Auto Truck Equipment Co., Pittsburgh, a high lift dump truck with body, as well as the hoist arms and frame, fabricated from strong aluminum alloy (Fig. 3). The truck which is loaded by gravity from overhead bins which are 6 ft. above the floor of the truck carried approximately 4000 loads of coal, averaging about 5 tons to the load during the first two years of operation. The body has stood up very well under this service and does not show any more wear than would have been shown by a steel body under the same conditions, according to report of engineers of the Aluminum Company of America which supplied the material.

## Fleet owners report big dividends on extra cost of aluminum bodies

Operator	Extra Cost Aluminum Body	Payload Capacity	Weight Aluminum Body	Weight Steel Body	Gain in Use of Aluminum Body	Aluminum Earns or Saves	Annual Profit on Extra Cost of Body
1.	\$850 (a)	750 gal.	9,115 lb.	11,035 lb.	1,920 lb.	\$235	27%
2.	645	11,940 lb.	2,800 lb.	4,600 lb.	1,800 lb.	1,332	206%
3.	...	5½ tons	600 lb.	1,600 lb.	1,000 lb.	1,200	...
4.	535	24,450 lb.	1,775 lb.	3,800 lb.	2,025 lb.	1,800	337%
5.	850	13,360 lb.	1,750 lb.	4,330 lb.	2,580 lb.	1,448	170%
6.	400	15,800 lb.	1,625 lb.	3,025 lb.	1,400 lb.	724	181%
7.	1,000	1,400 gal.	2,200 lb.	3,440 lb.	200 gal.	1,500	150%

(a) Reduced investment in smaller tractor \$500.

1. National Refining Co.
2. Pittsburgh Coal Co.
3. C. A. Fuller Coal Co., St. Louis
4. Seaconnet Coal Co., Providence, R. I.
5. Corn Products Co., New York
6. Keystone Stores, Pittsburgh
7. Trackage Service Station, Inc., Milwaukee



## ALUMINUM BODIES

A motor freight body of aluminum alloy built by Yankee Motor Bodies, Inc., of Los Angeles in 1926 traveled more than 400,000 miles and has been in use in succession on three different chassis. The large mileage is the result of operating in overnight service between Los Angeles and San Francisco.

Bodies built of aluminum alloy are much more readily available now than was the case in the pioneer days of two or three years ago. Engineering data for aluminum bodies have been evolved and body builders have acquired greater experience in fabricating these materials. Coupled with this development is that in manufacture of strong aluminum alloy and their fabrication into various commercial shapes, such as Ts, Ls, channels and sheets. All of these are available in various composition and heat treatment, for different types of service.

The extent of this distribution of knowledge of building bodies of aluminum is shown by a bulletin recently issued by a prominent truck manufacturer. "Body builders who two years ago had never heard of aluminum bodies are now building more of them than they are of steel. One or more of the leading body shops in nearly every important city is now qualified to build nearly any kind of closed commercial body with aluminum structural sheets to replace both wood and steel and accomplish a reduction in weight."

### ● One-Piece Construction ●

**M**ORE extensive experience in building and in operating aluminum bodies has brought to light many incidental advantages of this material for certain types of bodies. On van and other relatively wide bodies, it has been found that reduction in weight of the body makes it possible to use lighter outriggers, with an additional saving in weight. In large panels, such as those in vans, a smooth and unbroken surface is desirable in many cases. A single sheet of aluminum 28 ft. long as used in each side of a van built by McCabe-Powers Autobody Co., St. Louis, Mo., for the General Warehousing Co. of that city. Roof sheets 9 ft. 2 in. wide and 20 ft. long are available for the making of one piece roofs.

Although most of the bodies of aluminum alloy now in use were produced on order for customers, several body builders now are offering stock express bodies to their customers and at least one vehicle builder offers a stock aluminum body. Among these manufacturers are Auto Truck Equipment Co. of Pittsburgh, and Yankee Motor Bodies, Inc., of Los Angeles. These bodies are ready to mount on standard chassis. The Ford town car delivery, recently announced, carries an aluminum body.

Increase in capacity brought about by the use of aluminum for the building of truck tanks for hauling gasoline can be calculated very readily. In smaller truck tanks, the saving in weight increases the load which may be carried upon a given chassis while in the larger units it permits more gallons of gasoline per trip of truck or truck and tractors. The yard stick for body weight in this field is tank-weight per gallon of payload. Weights of the order of 2.5 to 3.5 lb. per gallon of gasoline were not uncommon a few years ago. A marked reduction from this figure has been obtained by refinement of design and application of aluminum alloy. An aluminum tank truck unit weighing less than 1 lb. per gallon of payload was recently delivered to the Humble Oil Co. by the Standard Steel Works, Kansas City, Mo. This truck tank and trailer unit has a capacity of 493 gallons.

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The Commercial Car Journal

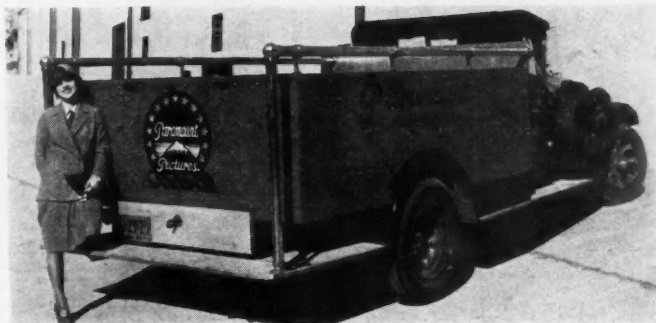


Fig. 4. This Camera-car body built for Paramount Pictures by Yankee Motor Bodies Corp. weighs one-third as much as steel body

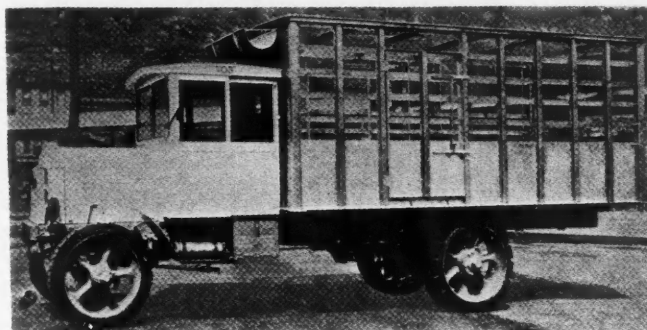


Fig. 5. Replacing a steel and wood body with this aluminum job at extra cost of \$850 increased work value of truck \$1448 per year



Fig. 6. Aluminum alloy was used in construction of this tank by Davis Welding Co. and in the semi-trailer by Fruehauf Trailer



Fig. 7. All-aluminum trailer and body built by Highway Trailer Co.

April, 1931



# MODERN CABS RIVAL

THE driver is human. He shivers in the cold, sweats in the heat, suffers in foul air, stretches stiff joints, strains with poor visibility, etc. And being what he is, he wants and has the right to expect the same consideration for the betterment of his working condition as is extended to his fellow workers in other lines of activity. Accord him what he demands and, again like a normal being, he will respond in the form of greater efficiency and a greater sense of responsibility.

The modern cab, built with the comfort and safety needs of the driver in view, certainly has made great strides in this, the primary objective in cab designing. Many things have been done to promote the well-being of the driver by progressive cab manufacturers. Probably the most outstanding development has been the closed cab, assuring comfort and protection against the elements in all seasons and climates. Of this class coupe cabs, closely rivaling the comfort and appointments of passenger car design, are markedly common

today. However, practically all closed cabs are insulated against heat and provide at the same time proper ventilating facilities and maximum visibility.

Some semi-enclosed cabs provide somewhat the same advantages, being readily convertible into the closed type by curtains that button snugly to the cab sides.

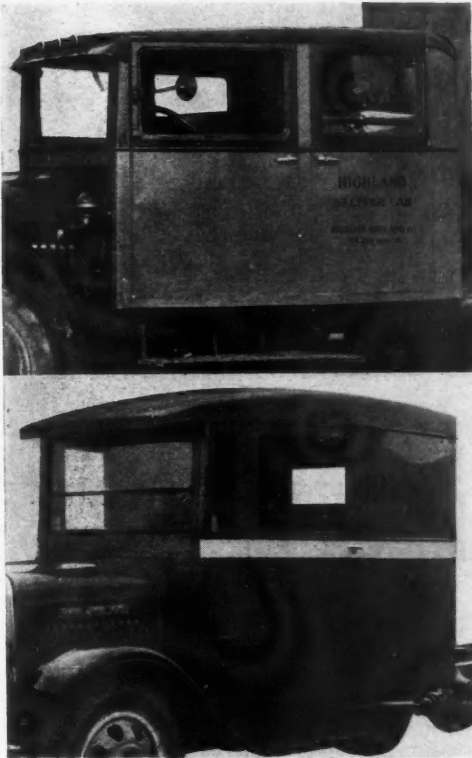
All cabs show the result of considerable attention to a number of small comfort-giving items. Windshields are mostly of one-piece type; sun visors and peaks are much in evidence; power windshield wipers are almost universal; seats and lazy backs are not only better sprung and upholstered but generally adjustable to suit individual requirements; windows are easily operable; in fact, cab appoint-

ments have gone so far as to include, in some cases, cigar lighters for the drivers.

Cabs today are built with strong, sturdy shells to protect the driver and cab alike against unforeseen accidents of heavy work such as a boulder slipping from the maw of a steam shovel or a reeling steam beam on a construction job. Another and not uncommon accident today might come in the form of a bullet sent on its journey by a shifty-eyed racketeer or highwayman. That's where the armored cab comes in. It pro-



# COMFORTS OF HOME



Top: Highland Sleeper cab. This cab has four doors, two giving access to the driver's compartment, and two to the sleeping compartment. The berth is high, giving a large space beneath for storage. Windows give vision and ventilation.

Bottom: Sleeping cab offered by Weatherproof. The berth, located behind the lazy-back, is 80 in. long and 20 in. wide. If two bunks are desired, the second can be located above the first. There is storage space below the lower berth. Windows or panels are optional at bunk ends.

protects both the driver and cargo. Bullet-proof plate has saved shippers and transportation companies many a valuable cargo in silk, cigarettes or similar consignment of goods, not to mention savings in lower insurance premiums.

With the motor truck taking a more and more important part in cross-country freight transportation and with hauling distances expanding, operators are being confronted with a new problem—driver endurance on long intercity runs. In the interests of safety and humanity, no man should be kept behind the wheel for more than eight hours without rest, yet in many cases, time and economy do not permit the driver to garage his vehicle and secure the needed rest at a hotel. Judging from their increasing acceptance the sleeper cab seems to be the answer. Its practicability is already a known fact having been established by the innovators of the idea, intercity furniture moving companies, through years of experience.

Hauling units fitted with sleeping quarters enable the driver to secure his required rest while

## Manufacturers

American Body Co., Dallas, Tex.  
 Clippinger, A. B. & Sons Mfg. Co.,  
 1100 S. Mill St., Kansas City, Kan.  
 Davenport Body Co., Davenport, Ia.  
 Davis & Son, Winona, Minn.  
 General Woodwork Corp., 1225-35  
 Budd St., Cincinnati, Ohio.  
 Highland Body Mfg. Co., 401 Elm-  
 wood Pl., Cincinnati, Ohio.  
 Kenyon Kumfort Kabs, Inc., Albion,  
 N. Y.  
 Metropolitan Body Co., 430 Grand  
 St., Bridgeport, Conn.  
 Moline Mfg. Corp., Moline, Ill.  
 Sheet Steel Products Co., Michigan  
 City, Ind.  
 The Stoughton Co., Stoughton, Wis.  
 U. S. Body & Forging Co., 135  
 Tonawanda St., Buffalo, N. Y.  
 Weatherproof Body Corp., 480 Shia-  
 wassee St., Corunna, Mich.  
 The body builders listed on Page 14  
 are another source of supply.  
 Many truck manufacturers also  
 are prepared to furnish cabs.

the truck is parked at the roadside, or in case of two operators, an arrangement of alternate sleeping and driving is made possible. In this way accidents due to sleepiness can be greatly reduced. Moreover, the driver's health is safeguarded, his morale is maintained at a high standard and he is better able and more willing to take proper care of the equipment entrusted to him. Various types of sleeper cabs are

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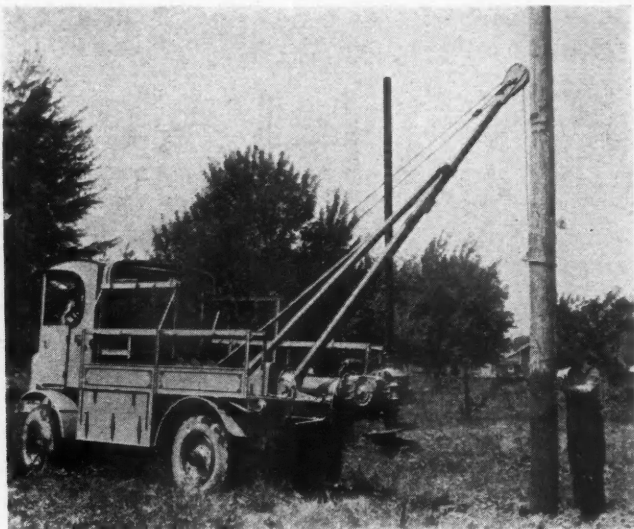


Fig. 1—Not hauling but pole setting is the job of many trucks used by public utilities. This combination truck carries a demountable pole derrick of steel tubing and a winch in addition to hole digger

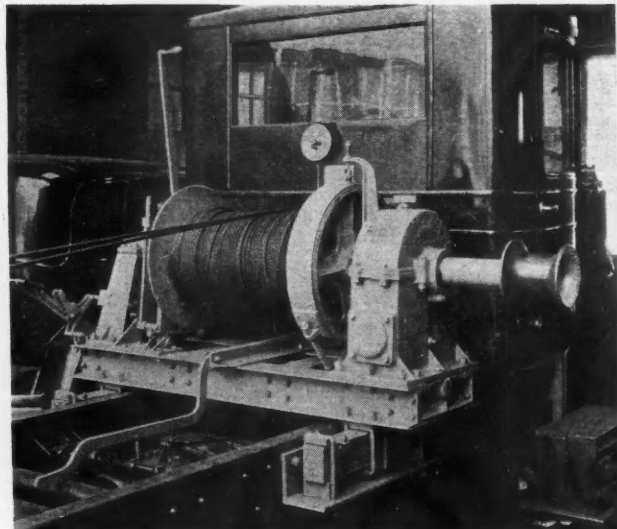


Fig. 2—A pull gage, just below cab rear window, shows the amount of strain on cable extending from this winch which is mounted on straight leaf springs. A capstan is attached to winch shaft at right of cab

# LIFTING AND PULLING

**T**HOUSANDS of trucks earn profits for their owners without carrying so much as a pound of freight. They serve outside the field of transportation by carrying and furnishing power for hoists, winches, derricks, cranes and reels. Other motor vehicles which carry loads take along one or more of these devices for unloading and loading and similar tasks.

A strong pull on a rope or steel cable is put to a surprisingly large assortment of uses. Applied in a derrick it swings poles with ease, taken into an underground conduit it pulls power and telephone cables; hooked to a swinging boom it performs the duties of a sky-hook very effectively.

The pull is accomplished in two ways: by winding a steel cable on a metal spool, called a drum, like sewing thread (Fig. 2), or by looping rope about a revolving spool called a capstan (Fig. 5).

A second rope or cable frequently is required to steer a heavy object to right or left while it is being raised or lowered. Pull for this purpose is provided by a pilot on the capstan (see upper left part of Fig. 5, which takes care of the second rope), or a second drum is used as shown in Fig. 6. For construction work and rigging both winch and drum are useful on the same job and a capstan is placed on the end of the winch shaft, as in Fig. 2 or in Fig. 7. These capstans on winch shafts, which are called "niggerheads," may be mounted on both sides of the winch.

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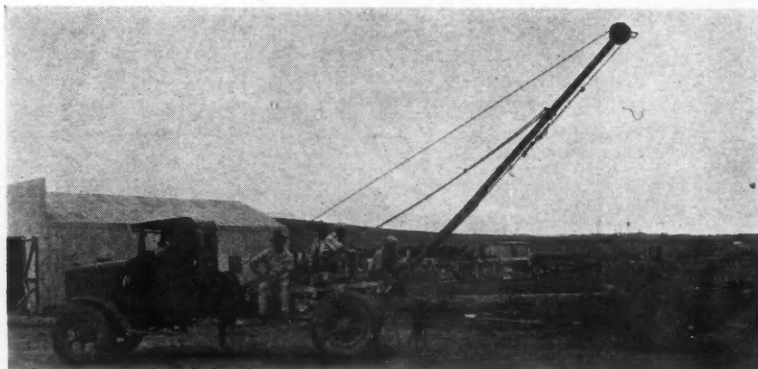


Fig. 3—Strenuous work in oil fields calls for assistance from winches and derricks. End of derrick is just above bolster of pole semi-trailer

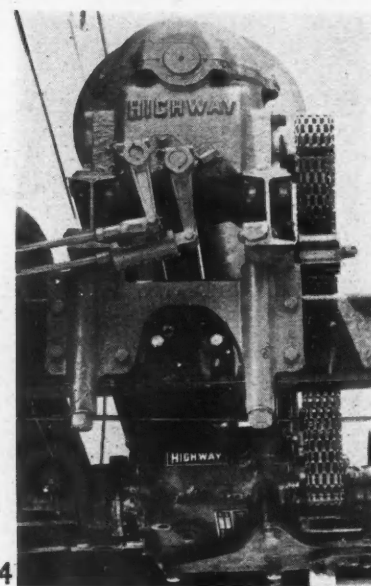
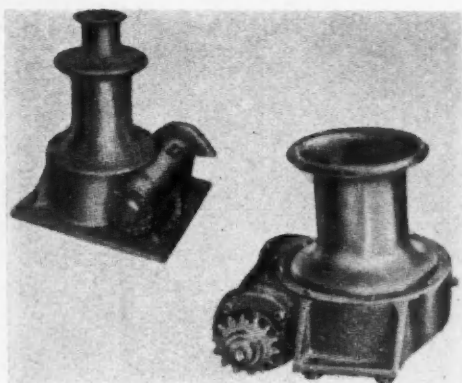


Fig. 4—Winches usually are attached to truck frames at rear of cab and are driven by chain or shaft from transmission or splitshaft take-off

The Commercial Car Journal



## LIFTING AND PULLING

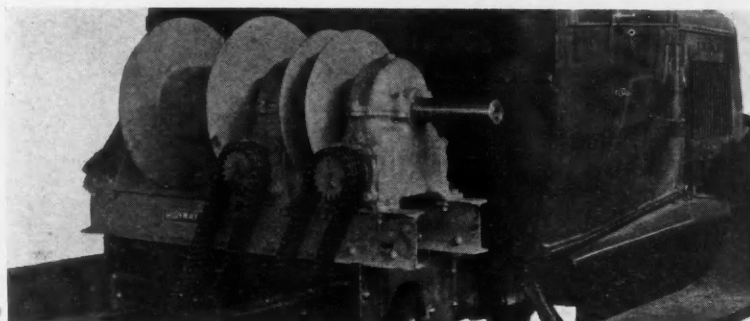


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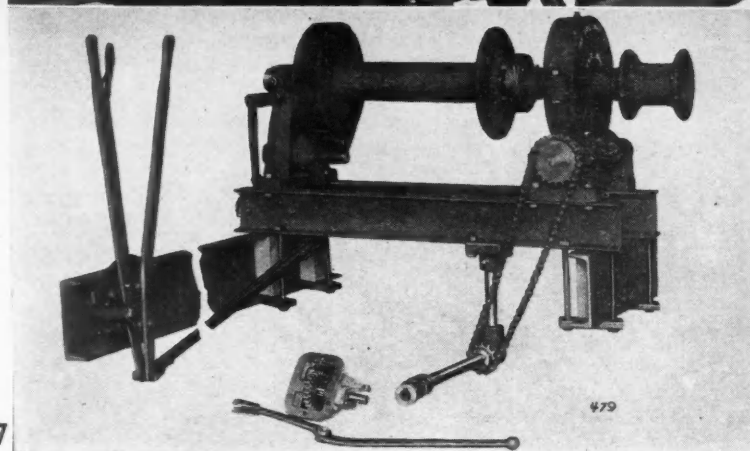
Fig. 5, above—A capstan designed for horizontal mounting is shown below, a vertical capstan with pilot placed above main spool

Fig. 6, at right above—A double drum winch with a separate chain drive to each drum

Fig. 7, at right—Complete assembly of winch with niggerhead, drive, mounting and controls



6

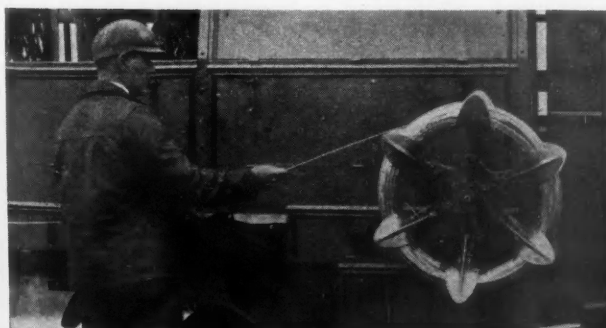


7

# DEVICES



8



9

Fig. 8—A swinging boom with power winch loads and unloads heavy pipe with ease on either side of the truck

Fig. 9—Power driven reel for winding telephone wire into rolls. The reel arms are collapsed to release the skein

While capstans are in use they are revolved at a constant speed and the lifting line is held in place or pulled in by hand by making several loops of rope around the spool and moving the free end of the rope toward or away from the coils.

Winches are provided with controls. They usually are driven by irreversible worm gearing so that shutting off the power by releasing the engine clutch holds the load in position. In this case power must be applied to lower the load. Another style of control is that of a friction clutch connecting winch and shaft and a brake to hold the winch when the clutch is released.

Controls are placed in the cab and usually take the form of extra levers similar to gear shift levers. If the power take-off has more than one speed and a double drum winch is used the cab contains an array of levers something like a section of a railroad signal tower.

A slow steady pull is desired for pulling cables into, or from, underground conduits. Series wound electric motors on electric trucks give this pull automatically as they increase torque as resistance increases and speed drops. They give warning of excessive resistance by slowing up. With a big truck engine furnishing power to a mechanical winch it is difficult to sense excessive resistance. Strain gages on the line measure the pull. A means of measuring the pull at the winch which has recently been developed is shown in Fig. 2. A dial indicates the strain on the cable at all times.

Power driven wire reels are popular in telephone work. The copper wire is pulled onto the U-shaped arms of the reel, making a round skein, and it is removed by collapsing the reel. Construction and operation are shown in Fig. 9.

Turn to 56 for list of makers of lifting and pulling devices

A SINGLE milk wagon which was displayed in the Dairy Industries show in Cleveland last fall reminded representatives of the numerous house-to-house delivery trucks present that the horse, losing out in other fields, has not yet been eliminated from frequent stop delivery service. In fact, stables of horses and delivery wagons scattered about the country give evidence that thousands of horses are busy every day lugging around bottles of milk or loaves of bread.

But all is not quiet and serene. Directed against this last stronghold of the horse in commercial transportation are the efforts of a group of manufacturers who are making no attempt to increase the consumption of oats and horseshoes. Most recent recruit in this field is the White Co., Cleveland, which has just announced introduction of a six-cylinder house-to-house delivery unit, and another is Dodge Brothers, which revealed a truck for this field at the Dairy Show. The White truck will be described in our May issue and, although complete story of the Dodge unit is not yet available, full details will be given as soon as possible.

While actually at work on a retail delivery route a horse possesses many desirable qualities as motive power for a vehicle. He can be stopped and started by a word of command, has strong pulling power at low speed, is well adapted to quick starts and to slow travel and he learns to perform part of his job automatically. In these respects it would re-

### Manufacturers

Detroit Dyko Drive, Inc., 3635  
Barlum Tower, Detroit,  
Mich.

Divco-Detroit Corp., 2435  
Merrick Ave., Detroit,  
Mich.

Dodge Brothers, Detroit,  
Mich.

Step-N-Drive Truck Corp.,  
1255 Niagara St., Buffalo,  
N. Y.

Thorne Motor Corp., 6147 W.  
65th St., Chicago, Ill.

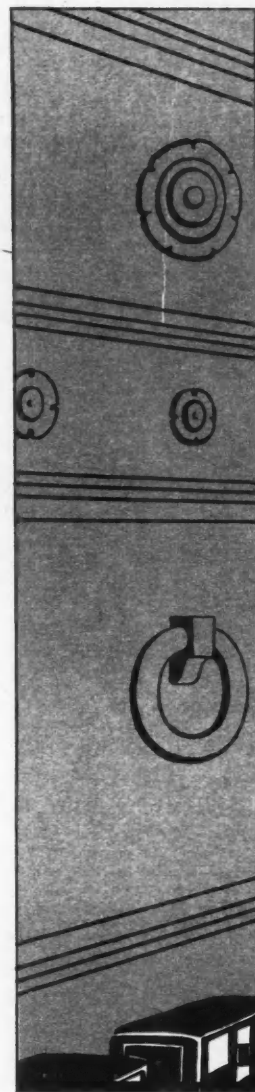
Twin Coach Corp., Kent,  
Ohio.

The White Co., Cleveland,  
Ohio.

### Prospects

Bakeries and Dairies.

Manufacturers are also pointing out advantages of these units for: Cleaners, Florists, Laundries, Mail carriers, News routes, Package delivery.



## NEW UNITS RUSH INTO

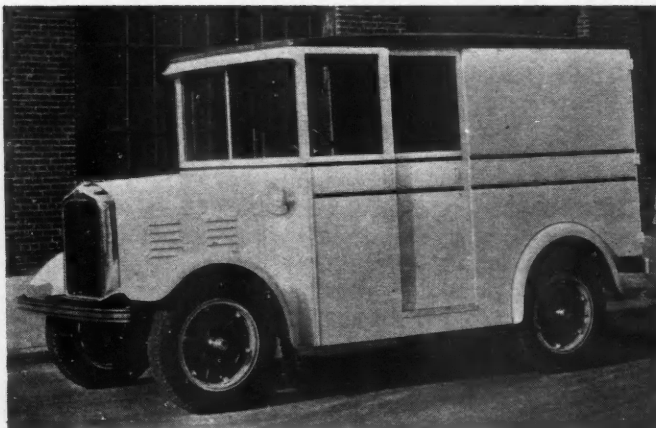


Fig. 1. The White Co. joins the ranks of house-to-house delivery truck producers by offering a six-cylinder job with the operator's platform 18 in. above the pavement



Fig. 2. Twin Coach unit is characterized by use of integral body and frame construction. Clutch and brake are operated by single pedal and by separate hand lever



## HOUSE TO HOUSE



# DOOR-TO-DOOR FIELD

quire a truly marvelous mechanism to supplant him.

Dairies and bakeries figuring delivery costs to several decimal places will not be influenced by sentiment, idle chatter or sales talks to give up an advantage which they find in horse-drawn delivery equipment. But the cost figures of their operations show, in many instances, upon analysis by motor transportation experts, that trucks adapted to the service can, and do, make substantial savings.

These experts do not stop with the horse on the route. They find out how much it costs to get a given horse and the load he is pulling to the start of a route. Suppose the route starts five miles from the distributing station, the waste time for horse and driver makes

the operation a different story. To overcome this handicap it is necessary to maintain stations at short intervals all over a delivery area. Figure out the cost of land, buildings and upkeep of fifteen or twenty stations in a medium-sized city. One delivery superintendent found that the total investment of a large company ran into millions of dollars.

Running five or ten miles to the start of a route does not bother a driver-salesman on a modern short-stop truck. Because of speed possible on the road before deliveries start these trucks make it possible to reduce the number of distributing stations and to locate them where land is less expensive.

There are other disadvantages in

## Bibliography

For additional information on the subject of house-to-house delivery see the following articles:

The Horse Myth Gets the Stable, Sept., 1929, page 14.

Dairy Horses Must Give Way, May, 1930, page 14.

## DOOR TO DOOR



Fig. 3. Divco-Detroit Model H has double drop frame and steering wheel. It may be driven by operator standing or sitting. A locking type control disengages clutch and applies brakes

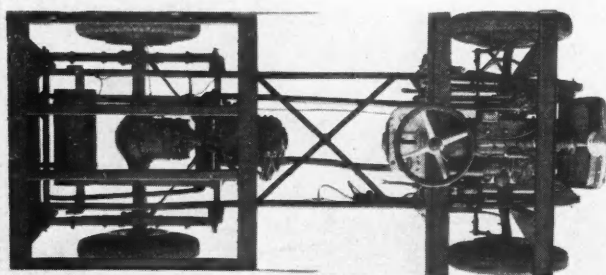


Fig. 4. The Thorne gas-electric vehicle has a removable engine-generator unit. There being no clutch or gears, it is started by opening the throttle



Fig. 5. Step - N - Drive trucks are built up from standard chassis such as Ford AA and Chevrolet. When driver is standing he stops the truck by pushing a single pedal

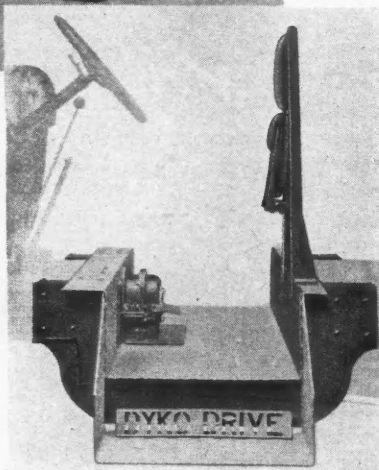


Fig. 6. Dyko-Drive unit for conversion of Ford AA trucks into low-aisle vehicles. A chain transmits power to the lower shaft

the use of horses. Off the route he does not make a good showing, in fact he is a total loss. He must be fed whether he works or not and he cannot be placed in storage when customers move to the seashore or mountains in the summer.

The same keen analysis which has revealed shortcomings of the horse as a delivery unit has also shown that motor equipment must be properly applied to the job to be successful. Trucks, bodies, loading platforms, routing, in fact the whole scheme of delivery, must be right. The delivery superintendent of a large dairy found that cab doors placed just six inches too far forward were costing him a lot of money because drivers had to squirm under the steering wheel each time they alighted on the left side of their trucks. This illustration is typical of many which might be given showing how much care must be exercised in motorizing multiple-stop delivery.

Manufacturers, to which previous reference has been made, have progressed rapidly in developing vehicles for house-to-house service. Carrying so many cases of milk or loaves of bread, or any other product, is easy. Providing quick access to the load and making it easy for the driver to get in and out of the vehicle and to drive it while seated or standing calls for ingenuity and experience.

A low floor in the driver's compartment, ranging from 12 to 18 in. above the ground, reduces distance he must step up to get in the vehicle and also provides headroom so that he may stand erect while driving. This low aisle naturally divides the vehicle into two compartments. Several manufacturers provide load space in the front compartment over the engine in addition to that in the rear.

Special controls are needed to enable a driver to operate the vehicle while standing. A single pedal which first releases the clutch and then applies the service brake makes "one foot" stops and starts easy. Equipping this pedal with a catch or lock provides brakes during parking automatically. A driver with one foot on a pedal cannot operate a foot accelerator while standing, and various types of hand throttle controls have been evolved. The throttle may be placed on top of the gearshift lever, on the dashboard, or interconnected with the clutch-brake pedal.

The gas-electric drive principle which gives smooth acceleration with but a single movement of the throttle has been incorporated in a house-to-house delivery unit. Manufacturers of mechanical drive jobs are striving for simplicity and ease of control. By applying vacuum boosters to brakes and to clutch mechanisms the force required to operate these parts is reduced and coordination made more easy.

Relatively short wheelbases, giving short turning radius and general handiness in travel characterize vehicles specially designed for this service. Engines are placed well forward over front axles, releasing more space for load carrying.

Descriptions of typical house-to-house delivery vehicles are given in the following paragraphs. No attempt has been made to compile a complete technical description but to tell about special features peculiar to the service.

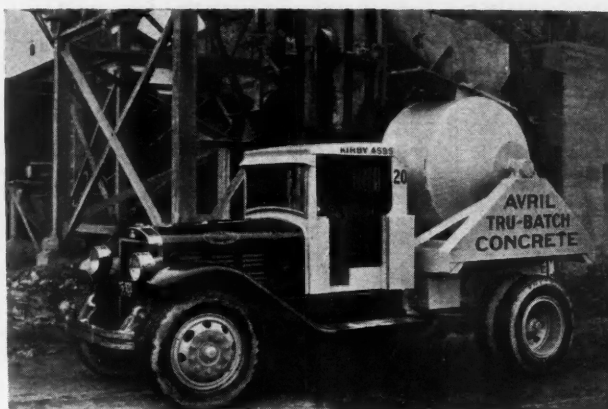
The new White house-to-house truck which is sold as a unit including chassis and body (Fig. 1) embodies a six-cylinder  $3\frac{1}{2} \times 4\frac{1}{2}$  in. White engine, three-speed transmission and White Model 4C rear axle with standard ratio of 5.875 to 1.

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Type 1: Hexagonal revolving drum, separate engine, hoist for discharge, carrier or mixer

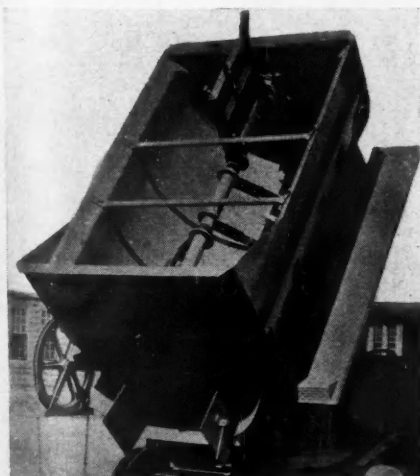


Type 2: Revolving drum placed crosswise, take-off drive, discharge through door, carrier

## CONCRETE CHURNERS CHORTLE AT DISTANCE



Type 3: Revolving circular drum, separate engine, reverse motion to discharge, carrier or mixer



Type 4: Stationary semi-circular body, moving paddles, take-off drive, hoist discharge, agitator

TRUCK bodies designed for transporting concrete have brought about something akin to a revolution in methods of handling this building material. Instead of setting up a concrete mixer on each job and operating it at intervals as mixed concrete is required during progress of work a contractor orders concrete from a central mixing or batching plant. The material is delivered to the job in large or small lots at specified times.

Mixed concrete can be moved in an ordinary dump body a short distance but settling which takes place limits this simple form of delivery to very short distances. To make use of the obvious economies of central plant handling and batching or mixing the area served by a plant must be large and this calls for long hauls.

Bodies now available are adapted to delivering concrete at any desired distance from central plant. These bodies are of two general types, agitators and mixers. Agitator bodies carry ready mixed concrete and they keep it from settling by stirring or churning it en route to destination. A body of this design is Type 4.

Mixer bodies are portable concrete mixers carried on truck chassis. They are loaded at the central plant with sand, stone and cement in proper proportions. For short hauls water may be added at the plant and the whole mixed on the way. On longer hauls water is

### Manufacturers

Anthony Co., Streator, Ill.  
Biehl Iron Works, Reading, Pa.  
Clinton Motors Corp., Reading, Pa.  
Davis & Son, Winona, Minn.  
Good Roads Machinery Co., Kennett Square, Pa.  
Highway Truck Mixer Co., Columbus Ohio  
Jaeger Machine Company, Columbus, Ohio  
Lee Transit Mixer Co., Indianapolis  
National Steel Products Co., Kansas City, Mo.  
Standard Steel Works, North Kansas City, Mo.  
Stepanian Truck Mixer Co., Columbus, Ohio  
Transit Mixers, Inc., San Francisco, Cal.  
Welbilt Body Co., Los Angeles, Cal.  
Wentworth & Irwin, Portland, Ore.  
Wood Hyd. Hoist & Body Co., Detroit

### Bibliography

For additional information on the subject of concrete bodies see the following articles:  
Four Ways of Hauling Concrete, Feb., 1929, page 28.  
Concrete Bodies — Revolving and Fixed, April, 1930, page 34.

### Prospects

Bricklaying Contractors (for mortar), Bridge Builders, Building Contractors, Building Material Dealers, Central Concrete Plants, General Contractors, Manufacturers having extensive plants, Municipalities, Road Builders, Sewer Builders, Stone Masons

carried in a tank and the mixing operation is carried on at, or just before arrival, at the job.

Many different types of construction are employed in mixer bodies. They are revolved by power take-off from truck engines, as in Type 2, or driven by an independent power plant as in Type 3. Another variation is that of method of discharging mixed concrete. Some of the bodies are tipped up in front by ordinary hoists, as Type 1 or 4, others are revolved in re-

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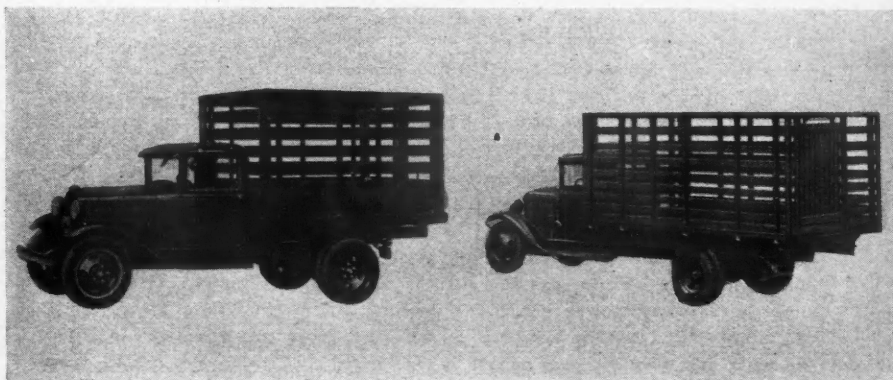


# ROLLING STOCK BUILT

CONSPICUOUS in the early days of handling livestock by trucks were the motley variety of makeshift bodies that decked the average farm truck. Stock was shipped in all kinds of readily assembled contraptions, which looked more like boxes and crates than bodies. While such equipment is still in evidence, it is rapidly disappearing due largely to the activities of automotive salesmen and the experience of farmers.

Bodies used by the progressive farmer of today are constructed to carry maximum loads, provide animals with maximum amount of comfort and protect them against injuries and bruises. The type of body employed, of course, depends on the kind of stock the farmer is raising. Size depends on the size of his farm and quantity of stock raised. The same factors must be considered by independent operators serving groups of farmers. While standard stock bodies are used by most farmers, many special bodies of large and small capacity have been developed and are being used in different sections of the country. Of these double and triple deckers are becoming quite common. A refinement of the double decker is the convertible double decker which can be quickly changed for single deck operation if necessary. Demountable stock bodies also are being used in increasing numbers. This type releases the chassis for the transport of general agricultural products when not required for the conveyance of livestock.

Typical stock live-stock bodies mounted on light capacity trucks



April, 1931

## Manufacturers

The body builders listed on page 15 are only a few of the many equipped to furnish equipment for the carriage of livestock. Most truck manufacturers, aware of the growing needs of this field, also are prepared to furnish rack bodies.

## Prospects

Stock farmers.  
Independent haulers.  
Farmer cooperatives.  
Slaughter houses.

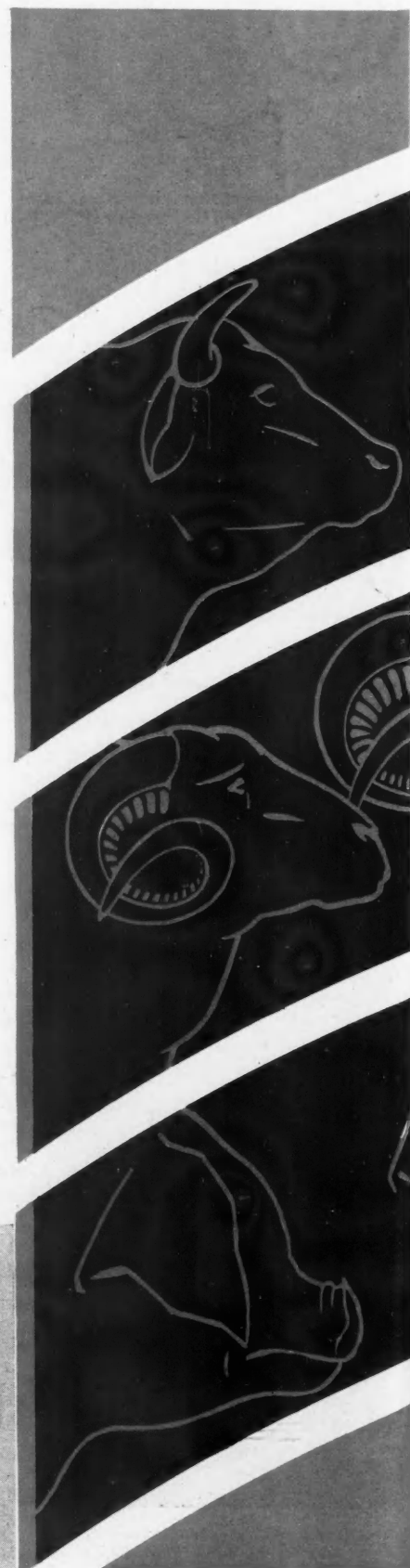
## Bibliography

For additional information dealing with phases of livestock hauling see the following articles:

The Truck's Place in Agriculture, Jan., 1929, page 22.  
Livestock Bodies for Large Loads, Dec., 1929, page 28.

Trucks Cut Net Cost of Lamb Marketing to Zero, Aug., 1930, page 25.

Trucks Give Farmers Distribution Relief, Dec., 1930, page 26.

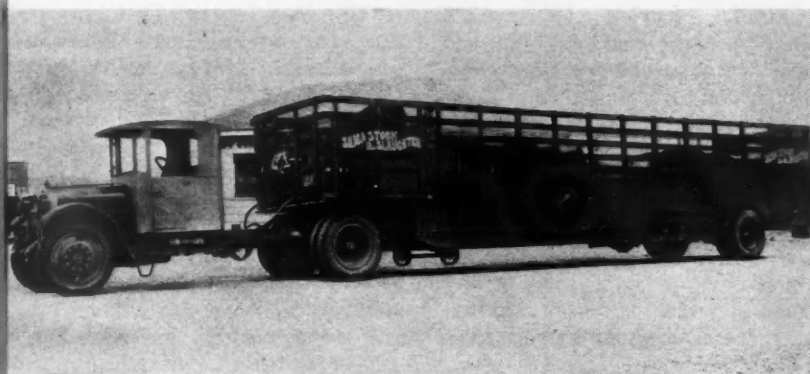


The Commercial Car Journal

The C

## LIVE STOCK

## JUST FOR LIVE STOCK



A large shipment of pigs taking their last ride in a rack body equipped semi-trailer

The modern livestock body incorporates several special features of construction proved necessary in the bitter school of experience. Among them are: railed type of construction to assure ample ventilation; sufficient head room between decks to permit livestock to stand; watertight decks and roofs; transverse camber of floors to allow for drainage; floor cleats to provide firm footing for animals; provision for readily mounting ramps; and tarpaulins for inclement weather.

All these body developments are the result of strides made in truck transportation of livestock during the last 10 years. Before that time farmers had to depend entirely on the railroads for shipping their livestock to the markets, except in some few cases where closeness to the market permitted droving. The inconvenience and costliness of this dependence is now an old story. Farmers suffered losses in accidents, shrinkage, not to mention bankrupting losses due to sudden drops in market prices while en route with shipments. Besides this the farmers of the old days most always accompanied their shipments together with one or more cattlemen, which, of course, represented an additional labor expense.

Then the truck entered the picture. Stockyard companies, quick to recognize this new mode of transportation, erected docks and other unloading facilities to help the farmers with their new implement and to expedite stockyard move-

ments. Farmers took to the new method like ducks to water, independent transportation companies specializing in livestock hauling sprung up almost overnight. The movement, once started, rapidly picked up momentum until today more than 25 per cent of the total shipments reach terminals via motor truck. The truck has unquestionably won a secure place among the livestock farmers and the field today offers dealers and salesmen of trucks and bodies an exceptionally rich market. The opportunities for the automotive industry in this field are really tremendous, as the following compilations by the Corn Belt Farm Dailies attest.

Livestock trucking in 1930 broke all records. Nearly 17,000,000 head of cattle, calves, hogs and sheep, representing an estimated tonnage of over five billion pounds and valued at approximately \$470,000,000, rode direct from farms to central markets. These figures present only part of the picture because they are based only on 17 of the country's leading terminal markets. There are dozens of smaller concentration points where practically all receipts are trucked in. Further, the number of head transported by truck from farm to rail-loading stations far exceeds the num-

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# FOR LUMPS ET CETERA

**L**ONG before man discovered the wheel he was engaged in moving things. Time hasn't changed this propensity much, only his jobs have become more numerous and complicated. But means have been placed at his disposal to lighten his burdens and to meet his every hauling need expeditiously and efficiently.

The dump truck is that means. This modern beast of burden serves man in building operations, in the carriage of fuel and ore, and in the disposal of waste materials. Many vocations, each with its individual characteristics, are represented in this general classification. Consequently, dump bodies, while fundamentally similar, vary in many minor aspects. That these variations, however, incur no severe difficulties, is seen in the multitudinous types of dump bodies in operation. It seems that no matter what the need, a body specially fitted for that need is available somewhere. Dealers, salesmen and

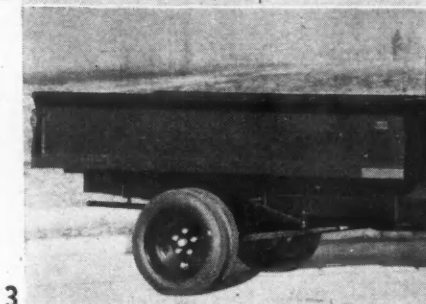
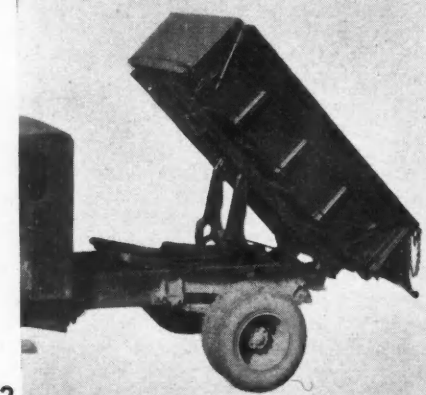
users can ill afford not to keep informed on this subject as well as on new improvements in design if they wish to contribute to better transportation. This review, designed to help all interested in dump work, includes bodies that discharge to the rear, to the side, two sides or all three sides and that dump by gravity, power or manually operated mechanism. Further, it broadly classifies as follows: disposal; fuel; building materials; and three side dumpers; and special purpose.

Most notable developments of recent years include: extension of power dump to light capacity bodies; effort toward lighter construction without sacrifice of strength; welding process of assembling and general constructional improvements in understructures; sideboards, partitions, posts, bracings, tail-gates and accessory equipment such as chutes, hoppers, covers, etc.

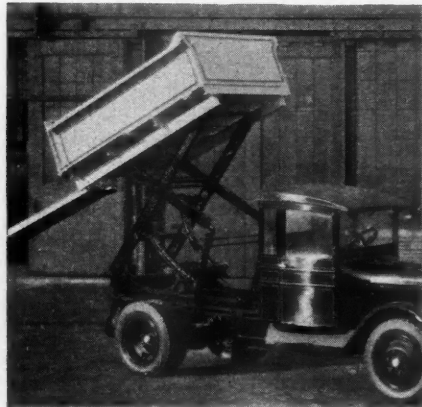
## Common Types

The most common types of dump bodies are those designed with either straight sides (fig. 2) or with sides that round off the floor (fig. 1). The latter design is employed more frequently in the lighter capacities, while the former is available in all sizes. Straight-side types are offered with or without flares at the top, side braces, running boards, swinging partitions, etc. (fig. 3). Single or double acting tail-gates are furnished with all types. Bodies in this classification vary in

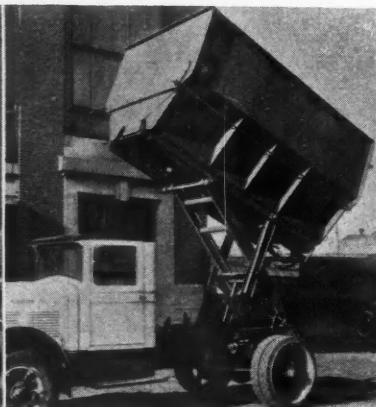
many refinements and details of construction, among which are: tail-gate construction, method of control, understructure, wrapping of running boards, headers and tail posts, extension boards and method of assembly, etc. Gravity dumpers, confined mainly to 1 and 1½ yard capacities, are short and light weight in construction and so balanced on the truck that when released the weight of the load automatically tips the body. Floor and sides are generally one-piece constructions



4



5



April, 1931

## Coal

Bodies used in this service are available in many sizes. Flares, while not entirely the rule, are a characteristic feature of coal bodies. Among the provisions incorporated in coal bodies to simplify delivery problems are special high lift hoists for chuting over lawns, special underbody construction for accommodating telescoping chutes, chute openings in the floor, side or tail-gates, high sides for coke and partitions. (See Figs. 4 and 5)

The Commercial Car Journal

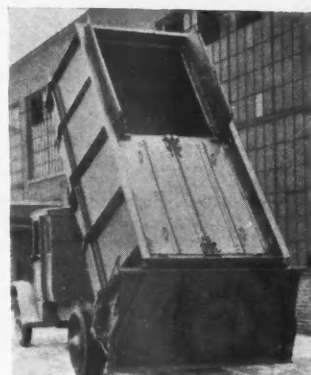
# IT'S DUMPS



6

## Garbage

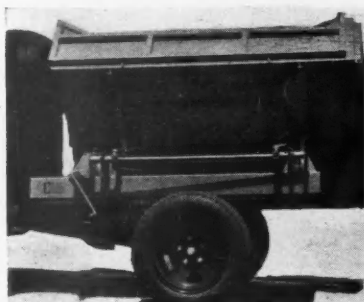
While garbage bodies with upward sloping rears, so designed for watertightness, are still quite common and will continue to be used in light capacity service, there is an increasing demand for larger capacity bodies with covered tops for sanitary removals. Two such bodies are illustrated. Fig. 7 depicts a 12 yd. body elevated by mechanical hoist. Designed for side loading, the sides are fitted with hand-operated horizontal sliding side panels. Top doors are provided for use in connection with snow removal. The other body (fig. 6) has a 16 yd. capacity and is fitted with a rotary hoist. Side panels are balanced by springs and roll up like the top of a desk. The top is also furnished with folding type doors



7

## Two and Three Way

These bodies avoid the necessity of jockeying or backing into position to unload, facilitate operations in narrow passageways and reduce traffic blockades. The two-way dump illustrated (fig. 8) can be unloaded from either side. It is manually operated by a quick-acting mechanism that moves the body sidewise a short distance after which the weight of the load and body assists in the dumping. The three-way dump pictured (fig. 9), is dumped by hydraulic power and is equipped with three gates, any of which can be laid flat. All sides hinge



8



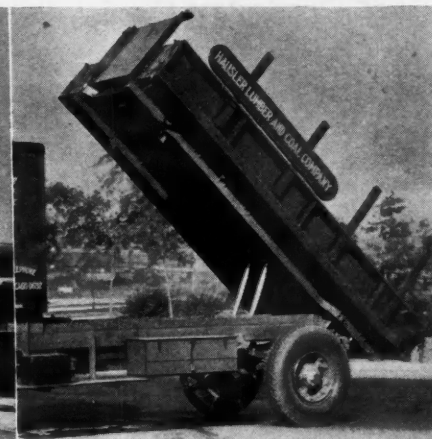
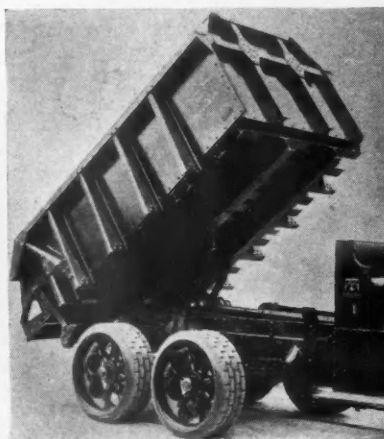
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## Special

Special needs require special bodies and there are very few needs that body builders have not met with ingenuity and skill. Bodies are furnished for handling large and heavy materials such as boulders (fig. 10) and light and bulky loads such as sawdust and trash. Attention also has been given to the easy handling of cumbersome articles such as lumber (fig. 11) and the careful handling of such loads as faced brick and tile. Another special body type is the all-purpose dump designed for quick conversion from a platform job into a regular, rack or a stake dump



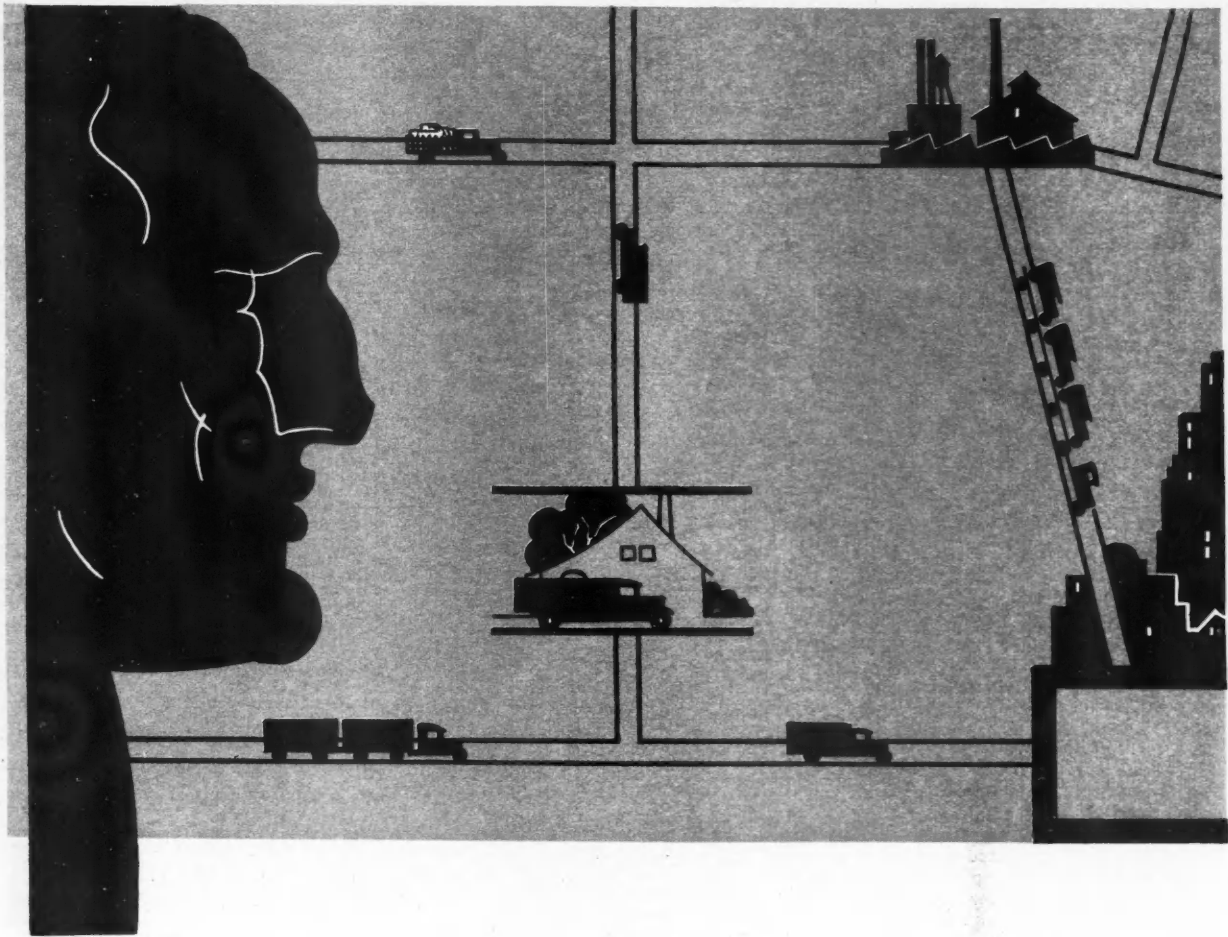
## Manufacturers

Anthony Co., Streator, Ill.  
Arcadia Truck Body Co., 21 Murray St., Newark, N. Y.  
Auto Truck Equipment Co., 7501 Penn Ave., Pittsburgh, Pa.  
Auto Truck Steel Body Co., 3028 Carroll Ave., Chicago, Ill.  
Best Body Corp., Coatesville, Pa.  
Commercial Shearing & Stamping Co., 1775 Logan Ave., Youngstown, Ohio  
Differential Steel Car Co., Findlay, Ohio  
Ditwiler Mfg. Co., Galion, Ohio  
Fitz Gibbon & Crisp, Trenton, N. J.  
Galion Allsteel Body Co., Galion, Ohio  
Heil Co., 3001 W. Montana St., Milwaukee, Wis.  
Hercules Products, Inc., Evansville, Ind.  
Highway Trailer Co., Edgerton, Wis.  
Hockensmith Co., Penn., Pa.  
Hughes-Keenan Co., Mansfield, Ohio  
Lee Trailer & Body Co., Plymouth, Ind.  
Marion Steel Body Co., Marion, Ohio  
Mayer Body Corp., 6461 Frankstown Ave., Pittsburgh, Pa.  
Metropolitan Body Co., 430 Grand St., Bridgeport, Conn.  
Perfection Steel Body Co., Galion, Ohio  
Standard Steel Works, 16th & Howell Sts., Kansas City, Mo.  
St. Paul Hyd. Hoist Mfg. Co., 292 Wallace St., St. Paul, Minn.  
Superior Body Co., Branson & 18th Sts., Marion, Ind.  
Universal Hoist & Body Co., Everett, Mass.  
Waterloo Bodies, Inc., Waterloo, N. Y.  
Wood Hyd. Hoist & Body Co., 7924 Riopelle St., Detroit, Mich.

## Prospects

Municipalities, Contractors (road and building), Coal dealers, Cement dealers, House wreckers, Lumber dealers, Asphalt dealers, Brick Mfg., Masons, Suppliers (building materials), Landscape gardeners, Manufacturers (raw and waste materials), Mines, Railways, Tile Dealers, Collectors (refuse and trash), Utilities.





# HAULERS HAVE BIG

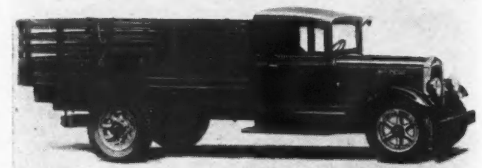
**B**OLD indeed is he who would presume to predict what conclusions will arise in the minds of the Interstate Commerce Commission after a study of the mass of testimony taken during its hearing on rail-motor coordination, which closed in Washington on March 17th last.

Complete typewritten record of the hearing probably will require a truck to move it from place to place but otherwise much of the testimony was not intended to foster motor transportation. Nevertheless, and notwithstanding conclusions by the I. C. C. and others, haul-for-hire and contract motor carriers benefited by evidence that they furnish a service so flexible and adaptable to varying needs of individual shippers that rail competition even at a lower rate is at a disadvantage. Instances were reported of motor lines getting business at several times the rail rates

and relations between some of the contract carriers and their customers are as close as those between departments in the same business.

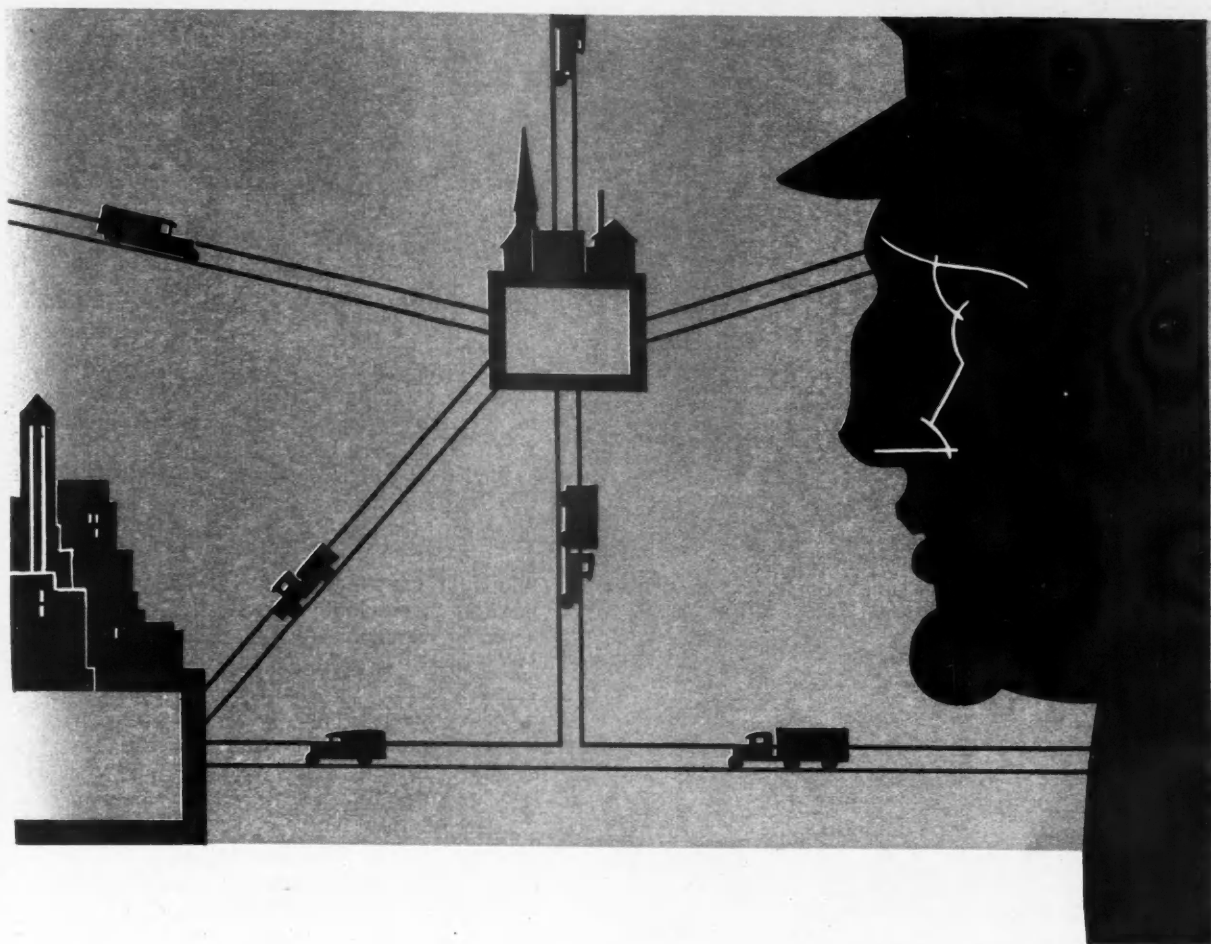
Knowing that their continued success depends upon giving to each of their shipper-customers the sort of transportation he desires, haul-for-hire and contract carriers have been among the leaders in adopting developments in motor truck chassis, bodies, trailers and equipment. In fact they have, in many instances, taken an active part in these very developments.

They seized upon higher road speeds as a means of cutting down time between shipping and receiving platforms or to extend the distance they could haul loads between evening closing

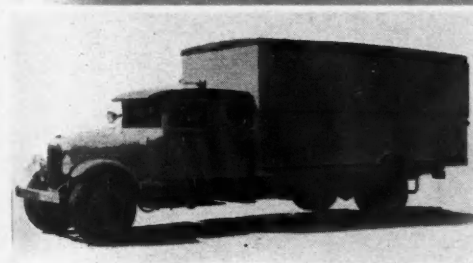


Top: Semi-trailers and four-wheel trailers are used for both terminal and inter-city service.

Above: Platform-stake trucks are as versatile as those of the horse-drawn dray



# EQUIPMENT CHOICE



Top: Household moving service covers the country by means of allied and co-operating operators.

Above: A type of vehicle and body popular for inter-city motor freight service. The relief driver sleeps while in transit

time of the shipper's establishment and the opening time next morning of the consignee's place of business. Faced with keen competition and with regulation and restriction on loads they took up trailers and trailer trains. Pneumatics, balloons, six-wheelers, lighter bodies, but why enumerate?

Services rendered by haul-for-hire and contract carriers include just about all the kinds of transportation for which trucks and trailers are designed. As local expressmen they take small parcels down to the railroad freight platform for storekeepers, they deliver l. c. l. freight from railroads to consignee; in Cincinnati, for example, a carrier interchanges l. c. l. freight between railroads. In more than a few cases

## Bibliography

For additional information on the subject of haul-for-hire see the following articles:

- The Cooperative Truck Terminal, Feb., 1929, page 18
- Advantages of Joint Terminals, March, 1929, page 30
- Truck Terminal Relationships, April, 1929, page 22
- Railroad Uses of Motor Trucks, May, 1929, page 18
- Developing Joint-Terminal Traffic, May, 1929, page 26
- Truck-Terminal Freight Traffic, June, 1929, page 30
- Truck-Terminal Rate Structure, July, 1929, page 26
- Truck Terminal Warehousing, Aug., 1929, page 26
- The Future of Truck Terminals, Sept., 1929, page 38
- Rails Prepare for Store-Door Delivery, Oct., 1929, page 14
- Store-Door Delivery Will Affect Truckmen, Feb., 1930, page 20
- Container Car Service, Feb., 1930, page 30
- New L.C.L. Service Menaces Truckers, March, 1930, page 30
- Trucks Create One-Stop Distribution, Feb., 1931, page 30

## Manufacturers

See lists on pages 14, 20, 24, 28, 47, 49 and 52



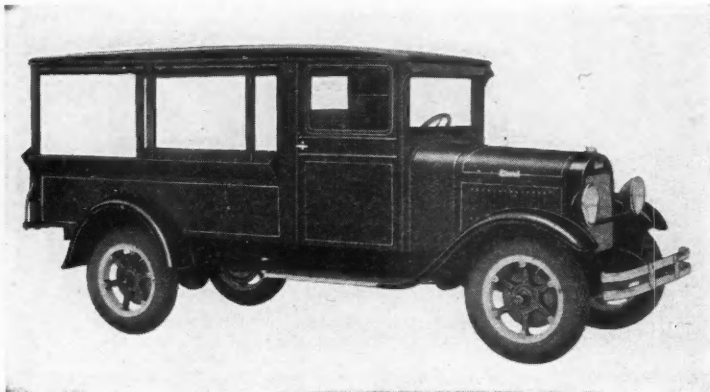


Fig. 1—The basic open express body, in common use since the days of horses, appears on modern trucks with integral closed cab and canopy top with side curtains or removable screen sides and rear

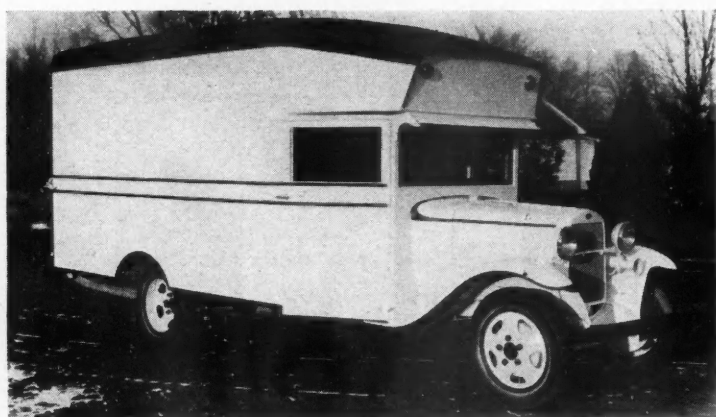


Fig. 2—Van bodies are used by haulers for moving all sorts of merchandise in addition to household furniture. Stock van bodies are available for popular makes of 1½-ton long wheelbase chassis

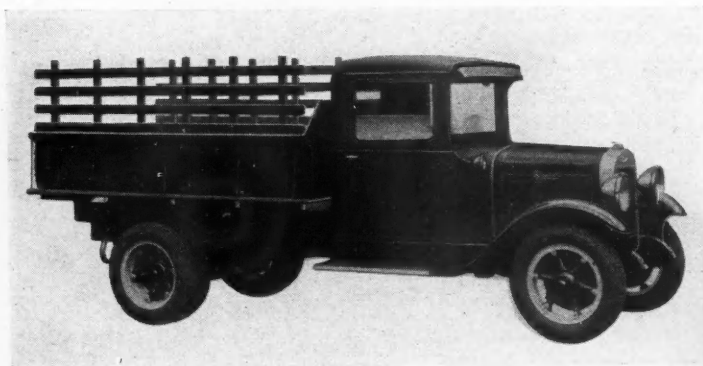


Fig. 3—Above. Many types of stakes or racks, usually detachable, are used for handling loads which are bulky or such that they will not stay within loading space in a standard express body truck

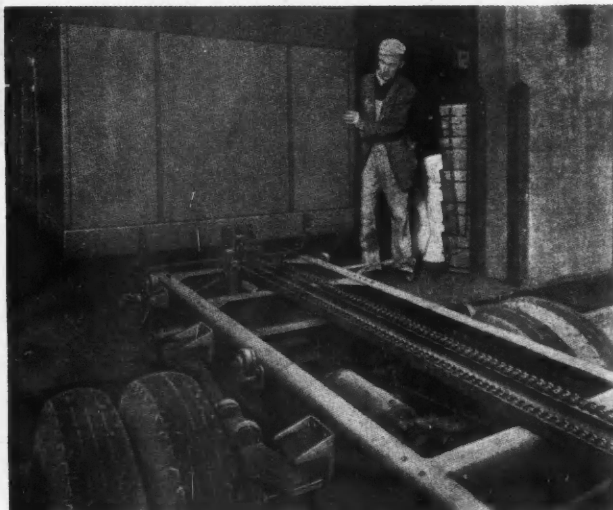
Fig. 4—At right. Demountable bodies which are large shipping cases save time and space in loading and unloading. The chassis is equipped with a Moreland Motor Truck Co. power body unloader

they furnish trucks to replace railroad "peddler" freight trains which pick up and discharge freight like a local passenger train takes care of passengers. Further cooperation with railroads comes in handling containers to and from railroad cars. Rail terminal warehouses require the services of trucks, in fact they are one link in a chain of distribution, the last part of which is a truck. Consolidating l. c. l. shipments into carloads at shipping point and delivering them to numerous consignees at destination is another form of truck-rail-truck transportation.

Obviously rail freight can be eliminated from this trio and freight taken right from shipping platform to store door or even house door. This form of transportation is direct. There is a minimum of handling, and in many instances packing is eliminated. To still further reduce handling of shipments demountable bodies (Fig. 4) are used which serve as oversize shipping boxes. Trailers accomplish the same purpose in many installations.

How far high-speed intercity freight hauling by motor will progress, no one can say. There is reason for believing that the sphere of usefulness of this form of motor transportation will continue to expand. Perishables, such as fresh fruits and vegetables, are being carried long distances directly from farm to city market. A report recently made by Bureau of Agricultural Economics, Dept. of Agriculture, shows that shipment of these products to the city of Los Angeles by motor truck in 1929 exceeded in tonnage rail freight shipments. The convenience of this sort of transportation appeals to both shipper and receiver. It may truly be said that this factor of convenience is one of the strongest arguments in favor of motor transportation.

Anyone who assumes that motor freight service



## HAUL FOR HIRE

is a static, unchanging business is fooling himself. Far from static, it is dynamic, progressive, interesting.

Moving vans illustrate this point. They have grown larger and larger, gotten too long for truck chassis and assumed the form of tractor-semi-trailer units. One might assume that the trend in moving vans is upward in size and carrying capacity. But with all of this emphasis on bigness there is going on a development in smaller vans. Several body builders offer stock vans for long wheelbase Ford and Chevrolet chassis. Warehousemen keeping a watch on records of business know that a considerable percentage of movings are too small for the big vans. Small vans meet their needs, and many of them have several small vans to each large vehicle.

Changes other than in size are taking place in bodies adopted by those in the business of hauling for others. The box car type of freight body has been altered, when necessary. Some unsung hero asked why a roof should be lugged around day after day over loads which are not harmed by weather or can be protected by tarpaulins. The open top body resulted from some such reasoning. Wallboard linings in a stake rack platform body and a canvas top give satisfactory protection for many sorts of freight. Even household movers use this combination. A very successful mover reported recently to a transportation meeting that furniture handled under canvas arrived at destination in better shape than that in vans. Which goes further to prove that nothing can be taken for granted very long in this motor freight industry.

Trucks used in this field likewise undergo changes in design. In the hectic days closely following the close of the World War solid tired trucks intended for speeds of 12 to 15 m.p.h. embarked on long intercity trips. Gasoline tanks were too small for single trips and the roadside hot dog stand with all night attendants on gasoline pumps reaped a harvest. Tanks are plenty big enough now for long trips. One heavy duty job carries the little matter of three 50-gal. drums of gasoline in its tanks.

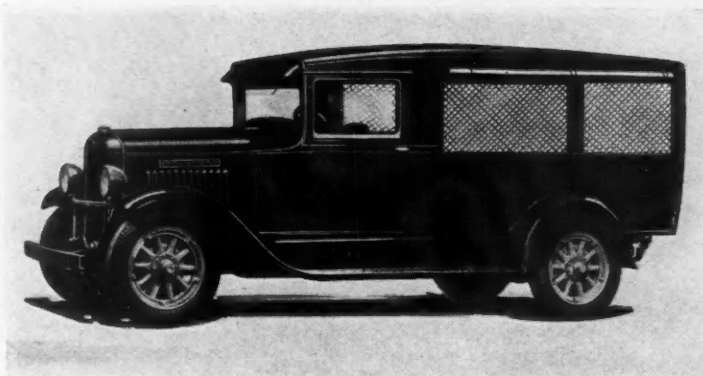


Fig. 5—Swell sides, curved roof and passenger car style front end detract nothing from usefulness of screen side express trucks with curtains for stormy weather



Fig. 6—Marker lights, canvas covering on top, side doors and exterior posts characterize present day heavy duty freight bodies from long experience in this service

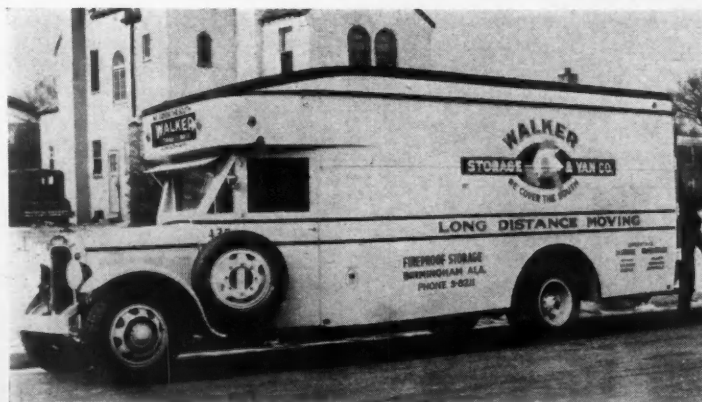


Fig. 7—Large vans for long distance moving of household goods are designed to make use of all available chassis space including a compartment above the cab



Fig. 8—At left. Equipment for haul-for-hire duty must stand up under severe service such as the task of this truck with aluminum body, which provides overnight motor service between Los Angeles and San Francisco



# ROAD WORK PAVES

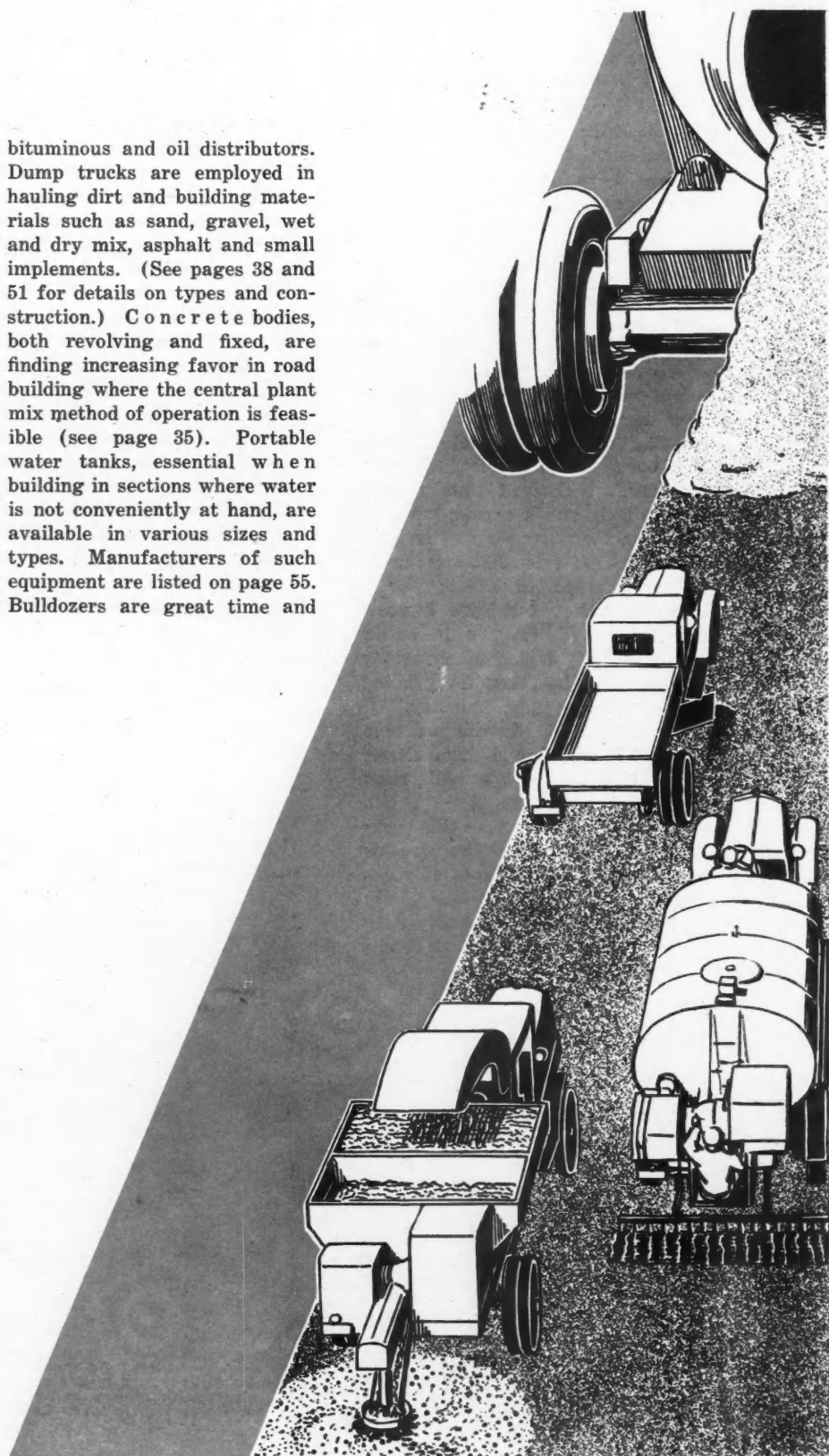
## THE WAY

**M**ORE than \$2,500,000,000 will be spent on United States highways before 1932 rolls around. Staggering even in days of prosperity this record sum is a virtual gold-mine to business today. The country needs and demands more and better roads. It demands that its established highways and city streets be maintained in a serviceable condition. It demands that they be kept clean and open, winter and summer. And to attain these ends it has appropriated this vast amount of money, which is available now, immediately.

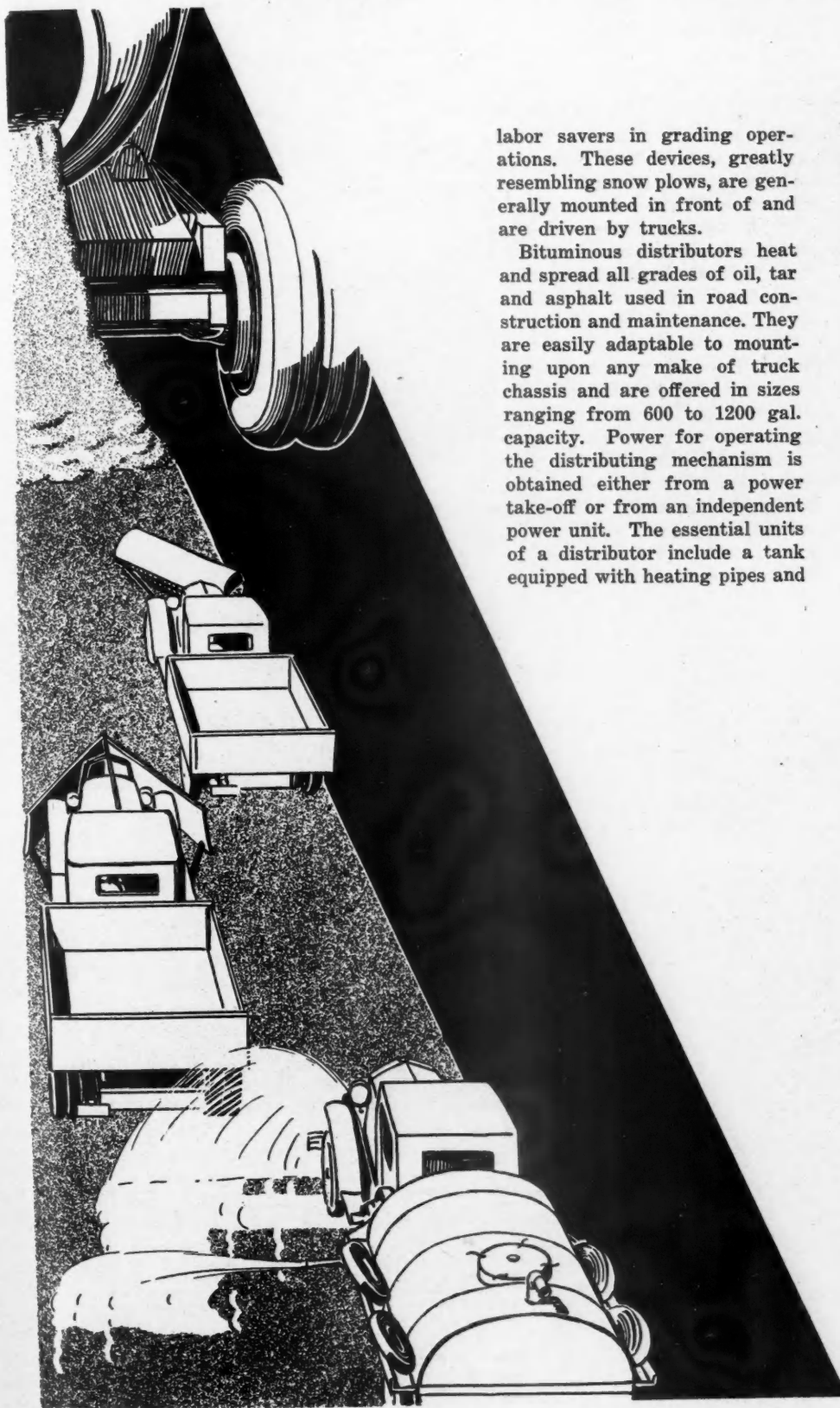
Both the truck and equipment industries are meeting present-day demands with a large assortment of modern machinery specially designed for particular services in all three departments of highway work—construction, maintenance and cleaning. The use and proper application of modern equipment means more work with less labor and greater output with less production cost. Successful contractors today are completing projects considered impossible a few years ago. The explanation is smart coupling of efficient organizations with the best available equipment. Contractors, state and municipal authorities have learned and in some cases are still learning that time and operating losses are mostly caused by an insufficient supply of equipment or by the operation of obsolescent and faulty equipment. Successful road builders also have learned that to survive with profit in the highly competitive scramble for contracts modern machinery is imperative.

Among the major items of truck equipment required in the construction of new roads and streets are dump trucks, concrete bodies, scrapers, bulldozers, water tank trucks and

bituminous and oil distributors. Dump trucks are employed in hauling dirt and building materials such as sand, gravel, wet and dry mix, asphalt and small implements. (See pages 38 and 51 for details on types and construction.) Concrete bodies, both revolving and fixed, are finding increasing favor in road building where the central plant mix method of operation is feasible (see page 35). Portable water tanks, essential when building in sections where water is not conveniently at hand, are available in various sizes and types. Manufacturers of such equipment are listed on page 55. Bulldozers are great time and



# FOR MORE EQUIPMENT



labor savers in grading operations. These devices, greatly resembling snow plows, are generally mounted in front of and are driven by trucks.

Bituminous distributors heat and spread all grades of oil, tar and asphalt used in road construction and maintenance. They are easily adaptable to mounting upon any make of truck chassis and are offered in sizes ranging from 600 to 1200 gal. capacity. Power for operating the distributing mechanism is obtained either from a power take-off or from an independent power unit. The essential units of a distributor include a tank equipped with heating pipes and

## Manufacturers

Acme Motor Truck Corp., Cadillac, Mich. (a)  
 Baker Mfg. Co., Springfield, Ill. (a)  
 Butler Mfg. Co., Cleveland (a, c)  
 Detroit Harvester Co., Detroit, Mich. (c)  
 Elgin Sweeper Co., Elgin, Ill. (c)  
 Etnyre, & Co., E. D., Oregon, Ill.  
 Good Roads Machinery Co., Kennett Sq., Pa. (a, d, f)  
 Heil Co., Milwaukee, Wis. (a)  
 Hvass, Chas., & Co., Inc., 508 E. 19 St., New York (b, d, f)  
 Kinney Mfg. Co., Jamaica Plain, Boston (c, d)  
 LaPlant-Choate Mfg. Co., Cedar Rapids, Iowa (e)  
 Maine Steel Products Co., South Portland, Me. (a)  
 Municipal Supply Co., South Bend, Ind. (b)  
 Pneu-Hydro Road Machinery Co., Cadillac, Mich. (e)  
 Rightway Corp., 228 N. LaSalle St., Chicago (a)  
 Root Spring Scraper Co., Kalamazoo, Mich. (a, e)  
 Rotary Snow Plow Co., Minneapolis, Minn. (a)  
 Universal Road Machinery Co., Kingston, N. Y. (f)  
 Utility Supply Co., Clintonville, Wis. (a, e)  
 Willett Mfg. Co., Grand Rapids, Mich. (a, e)

Letters at end of name indicate products the companies are especially prepared to supply, although many furnish other items as well. Key: (a) Snow plows; (b) flushers; (c) sweepers; (d) oil, tar and bituminous spreaders; (e) scrapers; and (f) sand and chip spreaders.

For manufacturers of other items of equipment such as special bodies, dump bodies, concrete bodies, tanks and six-wheel attachments see lists on pages 14, 38, 35, 56 and 30, respectively.

## Bibliography

For additional information dealing with phases of the subject of roadbuilding and maintenance, see the following articles:

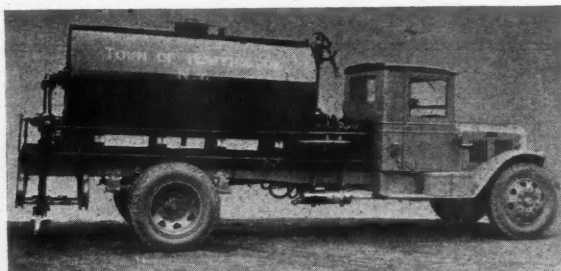
Snow Patrols Go to Medium Trucks, January, 1930, page 24.  
 Equipment for Cleaning and Maintaining Highways, April, 1930, page 60.  
 Roadbuilders Should Buy, Not Rent, Trucks, August, 1930, page 18.  
 Also see bibliographies given with concrete and dump body articles in this issue.

flues, power-unit, pump-heating burners, kerosene supply and pressure tanks, piping and distributing manifold. Among the main requirements of a distributor are the maintenance of constant and even temperatures and pressures, perfect control and simplicity of operation. Cold application oil distributors do not require heaters and are therefore free of many of the

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## ROAD WORK



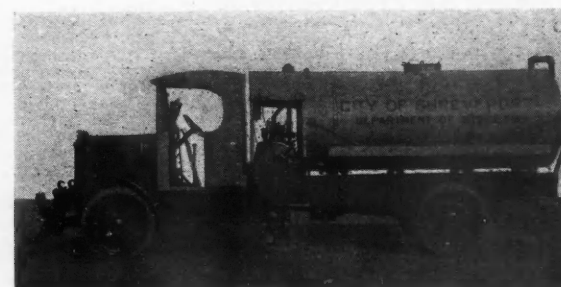
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Fig. 1—"Cold" oil distributor. The unit is of the pump pressure type, pumping oil direct into the discharge pipes under controlled pressure. Pump drive is by chain from power take-off. Tanks range from 500 to 1000 gal. capacity. Designed for fast work

Fig. 2—Bituminous spreader. These units apply hot tars and asphalts in highway construction and repair and embody a heating system for thinning paving material and a pump operated from independent powerplant or truck engine through take-off for discharging. Capacities range from 500 to 1200 gal.

Fig. 3—Bulldozer. A scraper type blade attaches to the front of a truck and is used to push dirt into fills and for grading generally. Some are detachable

Fig. 4—Double unit flusher. The pump is directly connected to an independent powerplant through a flexible coupling. Capacities range from 600 to 1800 gal. with one, two or three nozzles for front or sides

Fig. 5—Chip spreader. This device scatters stones supplied from the dump body by means of a revolving disk. Side pans are adjustable for any width

Fig. 6—Sand spreader. This unit spreads sand or cinders over icy streets. The model illustrated fits into body of truck, making its removal unnecessary

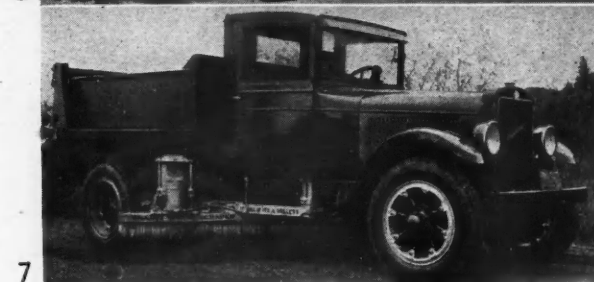
Fig. 7—Road grader. Hung between the front and rear wheels of a truck and controlled by hydraulic, pneumatic or mechanical power this device keeps hundreds of miles of gravel or dirt roads in shape



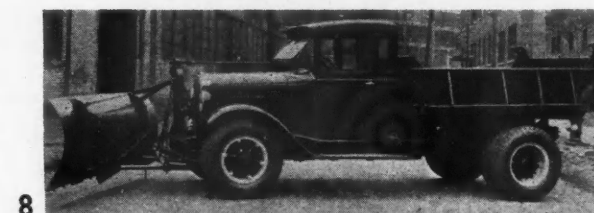
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Fig. 8—Single blade snow plow. Size of blade, lifting heights, angle adjustments, release mechanism and push rod structure vary with different makes

Fig. 9—V-shaped snow plow. Again dimensions vary according to make and requirements of service. Adjustable side wings are supplied for maximum cutting widths. This type is used for heavy snow falls

Fig. 10—Rotary type snow plow. The rotor driven by the forward engine cuts and throws the snow to the side like a mist through a gathering funnel. The rear engine furnishes motive power for the truck

## HOISTS



Fig. 1—A mechanical hoist which contains stub shafts on gears to provide the crank action



Fig. 2—Hydraulic power pushing a yoke raises upper ends of two pivoted arms attached to the body



Fig. 3—This hydraulic cylinder forces two rollers between a horizontal track and two cams beneath the body

# HOISTS HURDLE COSTLY HANDLING

IMAGINE the size of a gang of men which would be required to shovel a load of sand from a truck body in the same length of time it takes to discharge the load from a dump body. If you like figures, determine how much time and money is saved per day by a hoist and dump body. Multiply this by the number of dump trucks in use—then cheer for the mechanism which earns so much money and gets so little recognition.

The job of a hoist is to furnish a strong slow push under a body by converting fast engine speed into power for lifting and, at the same time, change direction of the power and apply it where needed.

Gearing will transform power and change its direction and this construction, shown in Fig. 1, is a mechanical hoist. Cranks or stub axles on gears and connecting links change rotary motion into lifting in an arc of a circle. Applying power to a screw jack type of mechan-

## Manufacturers

Anthony Co., 300 Vermillion St., Stretator, Ill.  
Columbian Steel Tank Co., Kansas City, Mo.  
Commercial Shearing & Stamping Co., Youngstown  
Dependable Mfg. Co., Stretator, Ill.  
Detroit Trailer & Machine Co., Detroit  
Differential Steel Car Co., Findlay, Ohio  
Eagle Truck Body & Mfg. Corp., Auburn, N. Y.  
Fairbanks, Morse & Co., Beloit, Wis.  
Fager Hydraulic Hoist & Body Co., Los Angeles  
Fitz Gibbon & Crisp, Trenton, N. J.  
Gallon Allsteel Body Co., Gallon, Ohio  
Heil Co., 3001 W. Montana St., Milwaukee, Wis.  
Hockensmith Co., Penn. Pa.  
Hughes-Keenan Co., Mansfield, Ohio  
Jungerson Dump Body Co., Milwaukee, Wis.  
Little Giant Products, Inc., Peoria, Ill.  
Marion Steel Body Co., Marion Ohio  
Marquette Tool & Mfg. Co., St. Paul, Minn.  
National Steel Products Co., Kansas City, Mo.  
O'Connor Machine Co., Sheffield, Pa.  
Perfection Steel Body Co., Gallon, Ohio  
Rock Mfg. Co., Waterloo, N. Y.  
Simplex Body & Mfg. Co., Conneautville, Pa.  
Standard Steel Works, Kansas City, Mo.  
St. Paul Hydraulic Hoist Co., St. Paul, Minn.  
Universal Hoist & Body Co., Everett, Mass.  
Utility Trailer Mfg. Co., Los Angeles  
Van Dorn Iron Works Co., Cleveland  
Warner Elevator Mfg. Co., Cincinnati  
Wood Hydraulic Hoist & Body Co., Detroit

## Prospects

(All users of dump bodies. See tabulation on page 38)

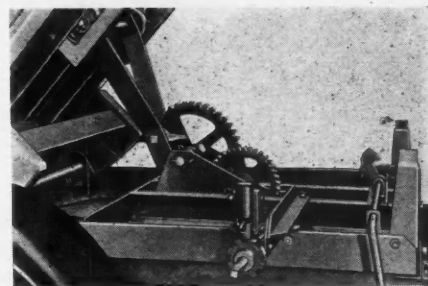


Fig. 4—Load on hand hoists is reduced by allowing rear of body to overhang its pivots



Fig. 5—High lift hoists are arranged to dump when elevated for coal delivery or to keep the body level for servicing refrigerator box cars

ism is another way of raising bodies.

The principle of the hydraulic jack, well-known to truck operators, has been incorporated in several types of hoist. Placed horizontally they are coupled to cranks and links or work against cams. Mounted vertically at the front of bodies they exert a direct lift by cable or, positioned under the body, they push upward. Vertical cylinders under bodies are mounted on trunnions to take care of changing angles during lifts.



## NEW UNITS RUSH INTO DOOR TO DOOR FIELD

CONTINUED FROM PAGE 34

A single pedal in the driving well, which can be operated by the driver in either standing or seating position, actuates the clutch and is interlocked with the throttle, so that the throttle is closed to idling position when the clutch is disengaged. When the clutch pedal is released, the throttle opens to the original setting of the hand throttle. Four-wheel hydraulic brakes are operated by service brake lever, which is applied by a forward motion. This brake is amplified by vacuum booster and the parking brake is applied by the same lever at the end of its stroke. The parking, or emergency brake, is of the external type mounted on a drum at the rear of the transmission.

Width of the body is 62½ in. and inside length 117 7/16 in. Of this length, 39¾ in. is in the front of the body to the driver's platform, 27¾ in. in the driver's platform and 60 11/16 in. in the rear of the driver's platform to rear of body. There is 73½ in. headroom at the driver's platform which is 18 in. from the ground when the vehicle is loaded. The body is supplied with two side door openings and one rear door opening.

The Twin Coach vehicle (Fig. 2) comprises an integral body and frame structure similar in general design to that of the Twin Coach buses. Mechanical units are mounted to the body main frame, as in conventional construction. The engine is a four-cylinder 3¾ x 4½ in. special Hercules, built especially for Twin Coach requirements. Transmission is a special Brown-Lipe Model 30-C providing three speeds forward and one reverse. Clutch is a 12 in. single plate Brown-Lipe. Brakes are 4-wheel hydraulic with molded linings and gun iron drums.

Clutch and brakes are operated by a single pedal and an independent brake pedal also is available for operating the brakes without releasing the clutch. The hand brake lever at the right of the driver is connected to the braking pedal mechanism so that clutch can be released and brakes applied without shifting transmission gears to neutral. External propeller shaft brake on the rear of the transmission is operated by a separate lever.

Wheelbase is 96 in., turning radius is approximately 17 ft. The body provides vision for the driver in all directions, although the glass panel may be removed from the inside and exchanged for steel panels, if desired.

The floor is 12 in. from the ground and 74 in. headroom is provided in the center section. The inside loading space has an area of 54 sq. ft. and the total cubic displacement of the inside of the body is 350 cu. ft.

A vehicle of this type was recently demonstrated to the U. S. Post Office Dept. in Washington for mail service.

Divco-Detroit Corp., Detroit, Mich., manufactures three types of house-to-house delivery vehicles: Models G with two-point control utilizing a steering mast and lever instead of a steering wheel, Model B has three-point control with both a steering mast and a steering wheel, and Model H (Fig. 3) which embodies drop frame and low aisle with a steering wheel. The latter model was introduced at the Dairy Industries Exposition in Cleveland. Model H may be driven from standing or sitting position and control enables the driver to disengage clutch, apply brakes and lock in this position with one movement of his foot.

A foot accelerator is provided for the driver when seated, a hand throttle is placed on the steering wheel and there is a hand throttle on the gear lever.

● Gas-Electric ●  
DROP frame has side rails 6 in. deep with 2 in. flange, all ¼ in. thick. Extending through the low aisle is a tunnel 4½ in. high, covering the propeller shaft. Brakes are four-wheel Bendix, two-shoe type, and are controlled by cables. The engine is a special four-cylinder Continental 3¾ x 4¼ in. Transmission provides three speeds forward and the rear axle of the spiral bevel semi-floating type.

The Thorne Gas-Electric vehicle (Fig. 4) which is offered with drop or straight frame embodies many unusual features of design. The power unit which comprises a four-cylinder 3½ x 4 in. Buda engine and 70-volt direct-connected generator mounted on a runway which slides into the frame, making it possible to remove or replace it easily. The motor, placed in the rear compartment, is of 70-volt type and it drives a spiral bevel gear semi-floating type rear axle. Body on the low frame unit is 14 in. above the ground, 72 in. headroom in the driver compartment and 49 in. in the rear compartment. The inside width of the body is 60 in.

The controls include a gas throttle and a special electrical type governor

which automatically speeds up the engine for hard pulls or steep climbs. Service brakes are Lockheed hydraulic parking brakes of the external type. The low frame unit has a wheelbase of 98 in., weighs 4000 lb. with body, has a rated capacity of 3000 lb. payload.

Step-N-Drive trucks (Fig. 5) are manufactured by Step-N-Drive Truck Corp., Buffalo, N. Y., using standard truck chassis, such as Ford AA and Chevrolet. The construction includes a heavy channel drop frame, special sitting-standing controls with choice of either narrow or wide body, the former accommodating 36 cases and the latter 42 cases. Sitting control includes an upholstered seat and back which folds under the steering column when not in use. Control includes standard clutch and brake pedals and accelerator. Standard control is accomplished by a single pedal, with extra wide foot pads, projecting into the driver's compartment. Pushing down on the pedal first throws out the clutch, then applies the brake, which may be automatically locked for use as a parking brake, if desired. The lock is released with the next stroke of the pedal. The hand accelerator is provided on top of the gearshift lever. Bodies are provided with two side doors and one rear door.

The Dyko Drive (Fig. 6) is a drop frame and control assembly designed to convert Ford Model AA trucks into low aisle delivery jobs. The unit is hot riveted to side rails of the Ford frame after a section of frame is removed. The propeller shaft is lowered and power is transmitted to it by means of an enclosed chain. A folding seat attaches to an upright bracket on the unit. When seated the driver operates the control in usual manner. For driving while standing a locking pedal operates clutch and brake in succession and when locked holds the clutch out and brake on. A step which extends below the standard running board is in the assembly.

### Concrete Churners Laugh at Distance

CONTINUED FROM PAGE 35

verse direction while in horizontal position, as in the Type 3 body, in which case curved blades scrape the concrete out a rear opening. Another method of emptying is to provide a door in the body through which concrete flows when the door is opened while at bottom of its circular path of rotation. See Type 4.

Mixer bodies possess all the churning ability of agitator bodies and many of them are used for carrying ready mixed concrete or for mixing in transit. Both types 1 and 3 have this dual ability.

## TANKS



Fig. 1—Airplane fueling units carry four, or more, tanks containing gasoline, oil, water and compressed air. Height of the plane's tanks requires elevating of fuel and oil compressed air or pumps

# TANKS CLAIM THANKS FOR HAULING ANY LIQUID LOAD

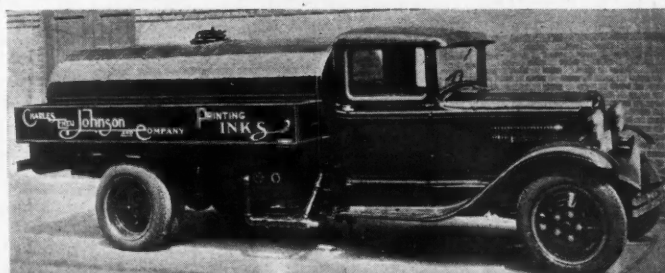
**H**AULING liquids is not the simple undertaking it appears to be on first thought. Mounting any odd sort of airtight tank on a truck chassis will not do the job. On the contrary, transportation of fluids requires study of problems in general and particular and attention to every detail of design, construction and operation of tank and truck. For example, emptying a tank of milk

## Manufacturers

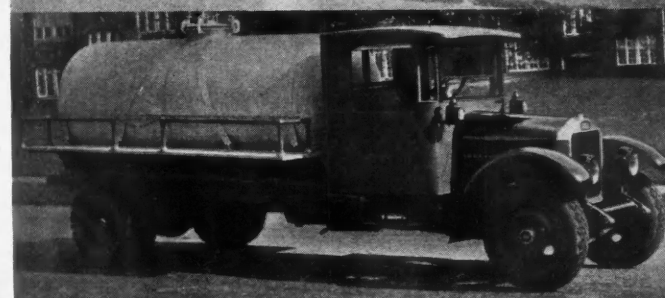
Albright, S. S., Co., 1300 U St., Sacramento, Calif.  
 Badger Body Mfg. Co., 1515 Cummings St., Omaha, Neb.  
 Boardman Co., Maple & Hawk Sts., Oklahoma City, Okla.  
 Butler Mfg. Co., 7400 E. 13th St., Kansas City, Mo.  
 Carll's, Chas. W., Sons, Cole & Linwood Sts., Trenton, N. J.  
 Columbian Steel Tank Co., 1519 W. 12th St., Kansas City, Mo.  
 Cope Company, 27 Ball St., Irvington, N. J.  
 Crown Motor Carriage Co., 2500 McPherson St., Los Angeles, Calif.  
 Davis & Son, 309 W. Third St., Winona, Minn.  
 Davis Welding & Mfg. Co., 1110 Richmond St., Cincinnati, Ohio  
 Detroit Trailer & Machine Co., 453 Beaufait St., Detroit, Mich.  
 Eaton, A. N., Metal Products, 13th & Willis Sts., Omaha, Neb.  
 F & S Body Co., 3027 Commerce St., Dallas, Tex.  
 Gilhool Body Works, 1227 Washington Ave., Scranton, Pa.  
 Glascote Co., 20905 St. Clair Ave., Euclid, Ohio  
 Heil Co., 3001 W. Montana St., Milwaukee, Wis.  
 Little Giant Products, Inc., 1500 N. Adams St., Peoria, Ill.  
 Morrison Bros., 24th & Elm Sts., Dubuque, Iowa  
 National Steel Products Co., 1611 Crystal Ave., Kansas City, Mo.  
 Niles Steel Tank Co., Niles, Mich.  
 Pfaudler Co., Rochester Gas & Electric Bldg., Rochester, N. Y.  
 Richmond Engineering Co., 935 Brook Ave., Richmond, Va.  
 Scott Welded Products, Long Island City, N. Y.  
 Sharpsville Boiler Works Co., Sharpsville, Pa.  
 Standard Steel Works, 16th & Howell Sts., North Kansas City, Mo.  
 Thompson, Robt., Co., 1015 S. Grand Ave., Los Angeles, Calif.  
 Truck Equipment Co., 1791 Fillmore Ave., Buffalo, N. Y.  
 Welbilt Body Co., 1400 E. Adams St., Los Angeles, Calif.  
 Wright, Thos., Co., 71 Golden St., Jersey City, N. J.  
 Wyeth Co., 110 Columbia St., Newark, Ohio

## Prospects:

Airplane operating companies, airports, alcohol plants, contractors, cesspool cleaners, fuel oil dealers, ink manufacturers, municipalities, oil companies, paint manufacturers, refiners, vegetable oil plants, chemical plants, cider makers, dairies, fertilizer manufacturers, fruit juice bottlers, vegetable oil plants.



2



3



4

Typical tank outfits for hauling three different liquids. Fig. 2. A printing ink delivery truck built with insulation side mounted pump and extra loading boxes on both sides. Fig. 3. An insulated single compartment milk tank with side racks for cans. Fig. 4. Four-compartment tank with side can racks



## TANKS

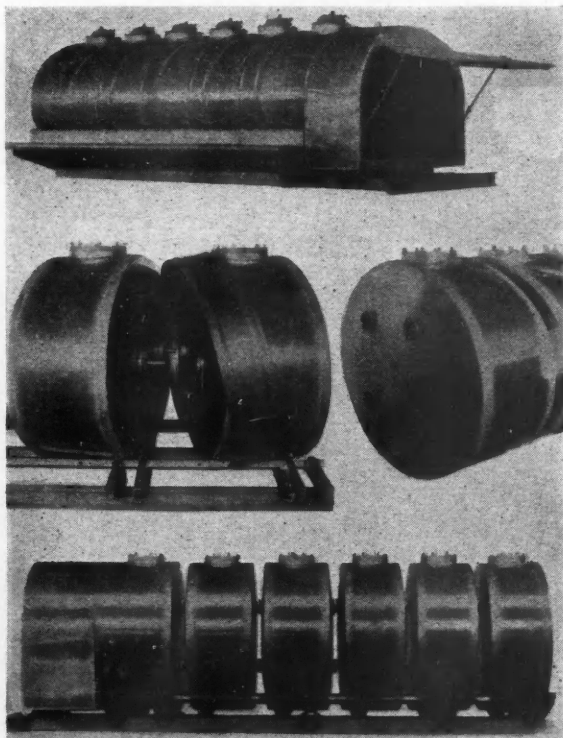
seems a simple matter, just a case of opening a valve and letting gravity do the rest. But the last few gallons flow slowly. Many creameries and bottling plants want milk delivered into tanks on upper floors; even the valves must be easily disassembled for cleaning. How about inducing printing ink to come out of a tank? How shall a rigid tank be mounted on a truck frame which is sure to weave on bad going?

Although stock tanks of various sizes are available for hauling common liquids such as milk and gasoline it is nevertheless true that all tanks are designed for the specific work they are intended to perform.

Gasoline tanks have been developed to a high degree, although this fact may escape the notice of a casual observer. Tanks for tank-wagon service commonly are an assembly of compartments with covering bands or complete covers. Manholes and piping are chosen with care; the possibility of collision in traffic has not been overlooked.

Bulk-hauling tanks with capacity for several thousand gallons are used on semi-trailers and on four and six-wheel trailers. Drop frame semi-trailers are incorporated in large units to keep the center of gravity of the load nearer the ground. The engineering problem of using the tank itself as a frame is difficult, but several such vehicles have been constructed.

Ordinary steel cannot be used for milk tanks, as even the slightest amount of corrosion can be tasted. This difficulty is overcome by coating the inside surface of the tank with glass or enamel, or by making use of corrosion-resisting metals such as stainless steel and nickel and other alloys.



8

April, 1931



5

Fig. 5—Milk tank body with can racks with two compartments each, containing 625 gal., which is covered with 2-in. insulation and sheet metal jacket



6

Fig. 6—Semi-trailer mounted tanks, frequently made with rounded front ends, have been adopted by many large oil companies for local and bulk hauling



7

Fig. 7—A unit which solved the problem of disposing of more than 75,000 gal. of pickling acid per day. These two wooden tanks with total capacity of 7200 gal. are lined with rubber

Milk is chilled at the farm and is kept cool throughout its journey to the consumer's doorstep. Milk tanks, therefore, usually are adequately insulated and the material is covered with sheet metal. Many milk tanks are provided with hand or power-driven agitators to prevent separation.

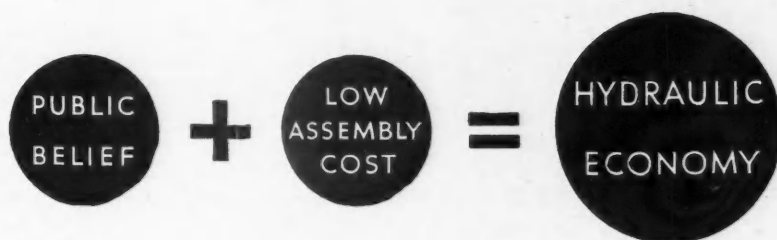
Tanks which have been designed for mounting on popular makes of 1½-ton trucks have attracted much attention in the past year or so. There are many routes on which such vehicles can be used to advantage. Tank manufacturers, seeing possibilities for quantity sales, have developed stock designs of tanks for milk and gasoline with understructures adapted to mounting on frames of trucks without fitting.

Tanks of special design are incorporated in many special-purpose trucks such as bituminous oil and tar spreaders, cesspool emptiers, catch basin cleaners, street cleaners and flushers.

Fig. 8—An all-aluminum separable compartment truck tank which is mounted on aluminum under-structure. Tubes extend through each compartment and long bolts are passed through the tubes from end to end and tightened. Tubes stiffen the compartments and construction provides a certain amount of flexibility for the whole structure

The Commercial Car Journal

The



## FACTS

One after another, leading passenger car, truck and bus manufacturers have adopted Lockheed Hydraulic Brakes as standard equipment.

Their choice has been based chiefly on two facts: public belief in Hydraulics which materially relieves sales resistance; and Hydraulics' remarkably low assembly cost . . . easy to put on, at a minimum of time and labor expense.

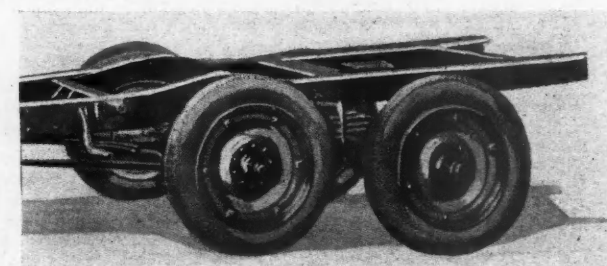
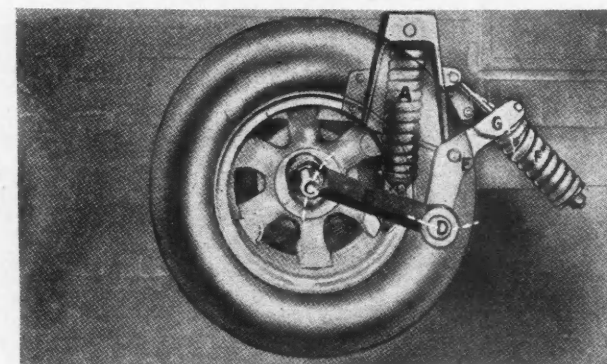
You'll find it worth your while to investigate these facts. They may fit into your own picture.

**HYDRAULIC BRAKE COMPANY**  
DETROIT, MICHIGAN, U. S. A.

**LOCKHEED HYDRAULIC**  
*Four BRAKES Wheel*



# EXTRA AXLE UNITS GIVE



THE past year has seen great acceptance of the six-wheel attachment idea, evidence of which may be seen in the increasing number of such units in operation everywhere on our highways and streets. Another very significant indication of the high regard in which the extra axle principle is held is the fact that some trunk manufacturers have adopted the principle in certain of their truck models.

Manufacturers of six-wheel attachments have made notable progress during the past year as a comparison between new and old models will quickly reveal. Aside from many minor improvements in design and construction, probably the two biggest developments of the year are provision for brakes on the extra wheels and greater extension of the attachment idea to trucks of larger capacity.

Originally conceived as a means of overcoming weight restrictions on four-wheel vehicles and of taking advantage of higher limits permitted on six-wheelers, the six-wheel attachment has since proved itself to be of utility in many other and, in fact, more important respects. Among the many advantages are: increased carrying capacity; increased loading area; better weight distribution; lengthening of tire life; easier riding and minimized danger of skidding.

The accompanying review reveals individual characteristics of various offerings.

Figs. 1 and 2—Utility 6-wheel units are offered in six models for installation on various sizes and makes of trucks. The standard heavy duty model designed for trucks of more than two-tons capacity and for tires up to 36 x 8 or 9/20 in. size consists of an axle, connecting levers and supporting brackets (see Fig. 1). The front ends of the levers, which are pivot mounted in the brackets, are shackled to the regular truck springs and the rear ends are connected to the dead axle through spherical bearings which permit free movement of the axle vertically. An extra heavy duty unit is furnished for vehicles exceeding 34,000 lb. gross and having tires larger than 36 x 8. In the light duty attachment (Fig. 2), which is adaptable to all trucks under two tons capacity except Fords and Chevrolets, the levers or rocking arms are flexibly pivoted on a square section cross-member supported by brackets. The front ends of these levers are shackled or directly connected to the eyes of the truck springs, while the rear ends carry stub shafts for extra wheels. Air or vacuum brakes are extra

Fig. 3—The Little Giant, made by Little Giant Products, Inc., for Fords and Chevrolets comprises a 2-in. round dead axle, a compensating lever, an auxiliary spring and a universal swivel bearing. The spring and compensating lever, mounted as a unit, is pivoted on a stub shaft carried in a bracket bolted to the frame. The auxiliary spring end is shackled to the rear end of the truck spring, while the rear end of the compensating lever is attached to the dead axle through a swivel bearing

Fig. 4—The Trucktor is designed to convert standard trucks into six-wheel crawlers with detachable tracks operating around pneumatic tires. The extra wheels are mounted independently of each other as well as of the driven wheels. The Trucktor wheel (refer to figure) is carried on stub shaft C, of which rocker arm B is a part. The load is carried by vertical spring A. Rocker arm B pivots at D and D is part of DEG. The track tension spring F bearing against G draws C and D forward, automatically tightening the track. Tracks slip on like chains

Fig. 5—The Olsen 6-wheel unit, made by the Swedish Crucible Steel Co., is furnished for both Ford and Chevrolet chassis and lists at \$150 exclusive of wheels and tires. The unit consists of a 1/4-in. frame extension of various types and optional lengths and a 2-in. square section dead axle connected to rear spring ends by ball joints giving axle freedom in all directions. Length of spring to the dead axle is greater than to the live axle so that the greatest part of the load is carried on the driving axle

# MORE HEED TO BRAKING

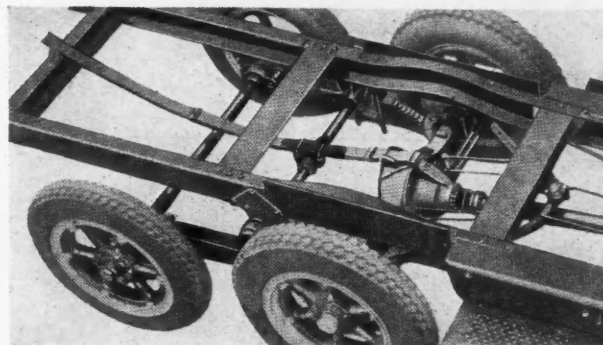
## Manufacturers

Continuous Torque Transmission Co., Cleveland  
 Dual Duty Co., Alma, Mich.  
 Emerson Brantingham Corp., Rockford, Ill. (E-B)  
 F & F Six Wheel Co., Los Angeles  
 Fager Six Wheel Attachment Co., Chicago  
 Herman Body Co., St. Louis, Mo.  
 King Zeitler Co., Chicago  
 Little Giant Products Co., Inc., Peoria, Ill.  
 Martin-Parry Corp., York, Pa.  
 P & H Multi-Wheeler Co., Rockford, Ill. (Jumbo)  
 Rowe Mfg. Co., San Francisco  
 Six Wheels, Inc., Los Angeles  
 Swedish Crucible Steel Co., Detroit  
 Trucktor Corp., Newark, N. J.  
 Twin-Flex Corp., Detroit  
 Utility Trailer Mfg. Co., Los Angeles  
 Warford Corp., New York

## Prospects:

All operators who have loads of two tons or more to transport are potential users

6



7

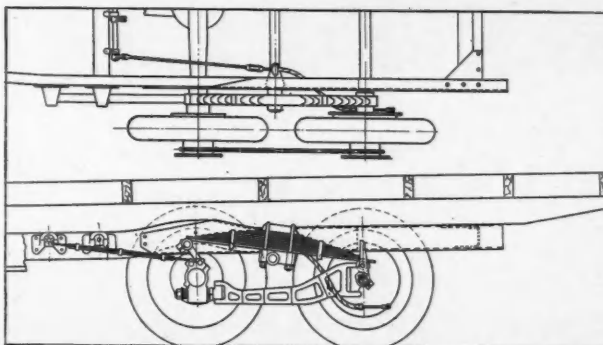


Fig. 6—Included in the E-B six-wheel attachment line are units designed for Fords and Willys Sixes listing at \$150 and \$200 respectively. They are similar except for the springs and frame extensions, two-stage type springs being used on the Ford against singles in the Willys, and slip-on frame extensions on the Fords instead of extensions reinforced by fillers in the Willys. Swiveling radius rods for the Willys unit is another difference. The springs are mounted to frame by trunnion bracket and shaft and give 60-40 spring suspension. Spring ends are flexibly attached to both dead and driven axles through hangers. What is known as a traction spring is unique in the E. B. units. It is designed to prevent "Jackrabbiting" and give more traction to the driving unit. This spring, composed of four 2 1/3 x 72-in. leaves, is attached to the spring cross bar and extends from the differential housing to the rear cross-member of the extended frame. Cable-controlled Bendix internal brakes are available

8



9

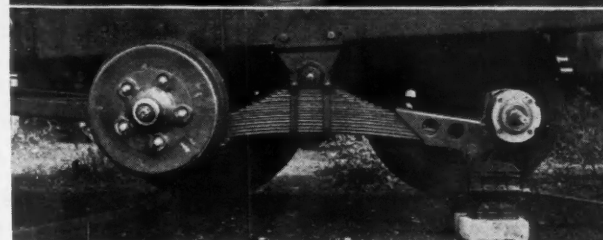


Fig. 7—The Twin-Flex attachment designed for Chevrolet trucks is furnished with or without brakes and may be employed as a dead or driven unit. The unit is attached to the rear of the truck axle and comprises a frame extension; two torque arms, swiveled for universal action on knuckles on both axes; a spring pivot rod, two steel spring radius rods and a roller type drive chain, which fits sprockets in the wheel hubs. Two semi-elliptic springs pivoted on a cross rod support the axles. Front ends of springs are shackled and rear ends ride on hard rollers

Figs. 8 and 9—Five models of six-wheel attachments for Fords and Chevrolets embodying two types of design are offered by the Price-Hollister Co. All are designated as Jumbo Multi-Wheelers. The first design employs four semi-elliptic springs and two equalizing beams which are trunnion mounted on each side of the frame. Front ends of the beams are shackled to the rear ends of the front springs and the rear ends of the beams are shackled to the rear ends of the rear springs. The front ends of the springs are shackled to frame brackets. In the second design the regular Ford springs are moved back about 30 in. and connected to both rear axles by universal ball spring hangers. So that the greater load will be carried by the driving axle, the dead axle is placed about 5-in. to the rear of the spring ends by castings which slip over and are firmly attached to the rear end of the springs

10

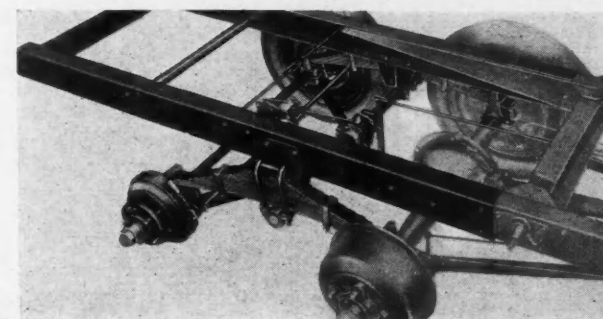


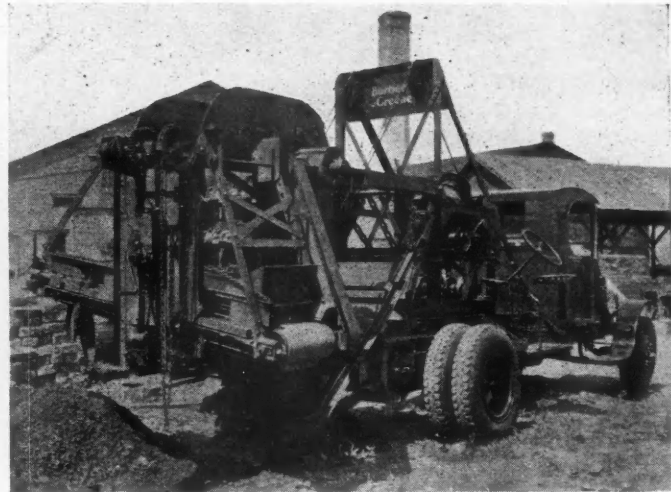
Fig. 10—Continuous Torque Transmission Co. offers six-wheel attachments known as HI-Lo units for Ford and Chevrolet trucks. These units employ the standard truck springs. U-bolts to a trunnion bracket, which in turn pivots on a cross-bar, the springs are proportioned to give 60-40 weight distribution. A feature of the suspension are the spring ends which slide in perches and a wish-bone type of torque and radius rod, which is flexibly attached to the spring cross-bar. The spring perches also allow slight side movement. Brakes are available



## COMPRESSORS AND DIGGERS



1



2

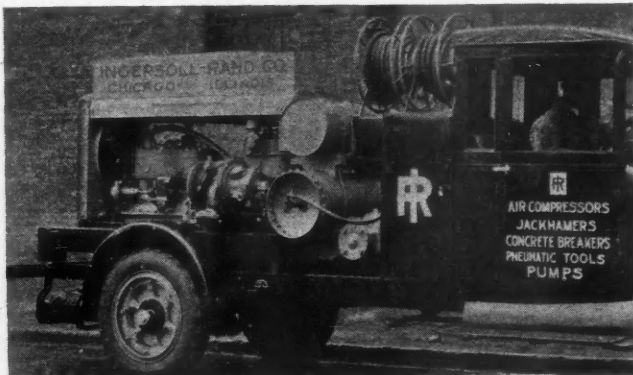
## DIGGERS

See page 56 for list of makers

Machines specially designed to dig post holes and pipe trenches today do easily what formerly took several arduous man-hours by hand. They not only expedite and lower the cost of digging, but free man of a nasty back-breaking job. Earth-borers (Fig. 1) come in two types—as independent or built-in units of the truck on which it is mounted. Both project beyond the rear of

the truck. Trench diggers also jut from the rear. The latter consist of a chain of sharp-toothed buckets, which are fed into the ground. The buckets cut and lift dirt on to a horizontal conveyor that in turn carries and discharges the dirt to the side. Power for either type of digger is obtained from a separate engine or from the truck engine through a transmission take-off.

3



4



## COMPRESSORS

See page 56 for list of makers

Air compressors furnish power for the operation of a variety of labor-saving pneumatic tools. Trucks bring that power right to the job, making it possible for contractors to capitalize the advantages of these tools on small or large jobs. To meet the various needs of contractors large air compressor outfits have been designed with independent power-plants for mounting directly on the truck chassis (Fig. 3) for large or small jobs as well as small capacity light duty air compressors for mounting anywhere on the truck as an auxiliary piece of equipment (Fig. 4).

Power for operating the latter is supplied by the truck engine.

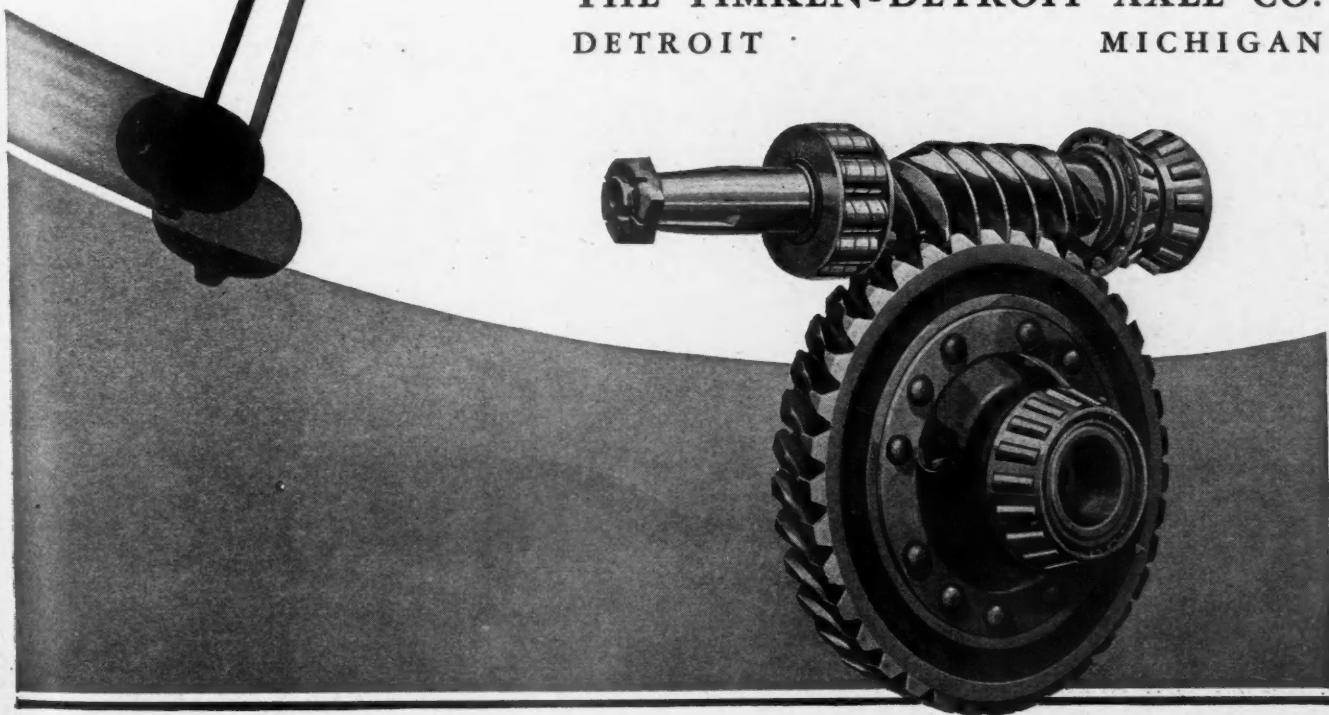
Compressors are of single, double and four-cylinder types, although two-cylinder types are more common. They also usually are single-acting, which means that air is compressed on one side of the piston, similar to the compression of a charge in a gasoline engine. Pressures are of the order of 100 lb. per sq. in. Governors limit engine speed and unload compressors at a predetermined pressure. The engine either idles or speeds up to normal, according to air pressure.

# The PENDULUM SWINGS

Preference in final drives for commercial vehicles swings from time to time toward one or another of several types.

*But never once* has Timken Worm Drive lost its leadership. Since its initial presentation, the Timken unit has been favored consistently by a convincing majority of truck and bus manufacturers; has demonstrated conclusively its efficiency, economy and dependability.

THE TIMKEN-DETROIT AXLE CO.  
DETROIT MICHIGAN





# Manufacturers of Lifting and Pulling Devices, Power Take-Offs, Air Compressors, Pumps and Earth Borers

## Lifting & Pulling Devices

American Hoist & Derrick Co., St. Paul, Minn.  
 Auto Truck Steel Body Co., 3028 Carroll, Chicago  
 Batavia Metal Products Corp., Batavia, N. Y.  
 Bay City Foundry & Machine Co., Bay City, Mich.  
 Braden Steel & Winch Co., Tulsa, Okla.  
 Carter Mfg. Co., 1132 Kansas St., Memphis, Tenn.  
 Channon Corp., 223 W. Erie St., Chicago  
 Erie Hoist Co., 2000 Holland St., Erie, Pa.  
 Four Wheel Drive Auto Co., Clintonville, Wis.  
 Highway Trailer Co., Edgerton, Wis.  
 Hobbs Mfg. Co., 605 N. Main St., Fort Worth, Tex.  
 Kingham Trailer Co., Inc., Louisville, Ky.  
 McDonald Motors, Inc., San Francisco, Cal.  
 Manley Mfg. Co., Bridgeport, Conn.  
 Mead-Morrison Mfg. Co., East Boston, Mass.  
 Muskogee Iron Works, Muskogee, Okla.  
 Round, D., & Sons, P. R. R. & Henry Rd., Cleveland  
 Schaefer, Gustav, Co., 4180 Lorain Ave., Cleveland  
 Silent Hoist, Winch & Crane Co., Brooklyn, N. Y.

Stimmel Winch & Machine Works, 518 W. 37th St., N. Y. C.  
 Utility Supply Co., Clintonville, Wis.  
 Western Iron & Foundry Co., Wichita, Kansas.

## Earth Borers

Barber-Green Co., Aurora, Ill. (trench digger)  
 The Buda Company, Harvey, Ill.  
 Highway Trailer Co., Edgerton, Wis.  
 Utility Supply Co., Clintonville, Wis.

## Power Take-offs

Bay City Foundry & Machine Co., Bay City, Mich.  
 Brown-Lipe Gear Co., Toledo, Ohio  
 Caldwell, L. L., Co., Los Angeles, Cal.  
 Highway Trailer Co., Edgerton, Wis.  
 Jaeger Portable Power Corp., Detroit  
 McCarger Mfg. Co., 425 Delaware St., Kansas City, Mo.  
 P-H Multi-Wheeler Co., Rockford, Ill.  
 St. Paul Hydraulic Hoist Co., St. Paul, Minn.  
 Truck Equipment Co., 1791 Fillmore Ave., Buffalo  
 Warford Corp., 44 Whitehall St., New York City  
 Wood Hyd. Hoist & Body Co., Detroit

## Air Compressors

Allis-Chalmers Mfg. Co., Milwaukee, Wis.  
 Bessemer Engine Co., Grove City, Pa.  
 Brunner Mfg. Co., Utica, N. Y.  
 Champion Pneumatic Machinery Co., Chicago, Ill.  
 Curtis Pneumatic Machinery Co., St. Louis, Mo.  
 Gardner-Denver Co., Quincy, Ill.  
 Globe Mfg. Co., Battle Creek, Mich.  
 Hewitt-Ludlow Auto Co., 75 Fremont St., San Francisco, Cal.  
 Lowville Machine & Vise Co., Lowville, N. Y.  
 National Brake & Elec. Co., Milwaukee, Wis.  
 Penna. Pump & Compressor Co., Easton, Pa.  
 Schramm, Inc., West Chester, Pa.  
 U. S. Air Compressor Co., Cleveland

## Pumps

American Steam Pump Co., Battle Creek, Mich.  
 Blackner Rotary Pump Co., Grand Rapids, Mich.  
 Globe Mfg. Co., Battle Creek, Mich.  
 Goulds Pumps, Inc., Seneca Falls, N. Y.  
 Jaeger Machine Co., 225 Dublin Ave., Columbus  
 Municipal Supply Co., South Bend, Ind.  
 Roper, Geo. D., Corp., Rockford, Ill.

## Aluminum Pays in Weight It Saves

CONTINUED FROM PAGE 27

One of the incidental advantages of the use of aluminum in gasoline truck tanks is that the load of gasoline is cooler and this condition reduces evaporation and expansion of the load.

An example of an aluminum body which both increases payload and decreases operating expense is one owned by the B. A. Fuller Coal Co., St. Louis, Mo. Accurate cost figures, reported by the Aluminum Co. of America, show that the aluminum body truck carries 5½ tons of payload, compared with 5 tons for trucks equipped with steel bodies and the truck with aluminum body costs 2 cents per mile less to operate. These savings amount to \$4.00 per day.

An interesting installation of aluminum alloy equipment are two Fruehauf semi-trailers with refrigerator bodies used by Pevely Dairies Co., St. Louis, Mo. Use of aluminum in chassis and bodies brought about a reduction in weight of 3050 lb. When the units were placed in operation it was found that the aluminum refrigerator bodies effected an additional saving by elimination of rust. In the former equipment milk bottles became streaked with rust which necessitated an additional cleaning.

Truck manufacturers, while directing the attention of their dealers and users to the advantages of saving weight in body construction, have not

overlooked the possibility of saving weight in the chassis itself. Many pounds of weight can be saved in the chassis by the use of aluminum in various points, other than the engine and transmission. Aluminum brake drums with which cast iron liners have been suggested and complete one-piece aluminum wheels were exhibited at the New York Automobile Show. Experimental departments of more than one truck factory are said to be trying out a more extensive use of aluminum in the chassis and its major units.

Weight saving has acquired a lot of momentum which many in close touch with the situation believe will carry it into fields at present almost untouched.

## Road Work Paves the Way for More Equipment

CONTINUED FROM PAGE 45

accessories necessary in hot bituminous spreaders. In most other respects, however, the cold outfits are similar to their warm counterparts. Because of the lighter weight cold oil distributors are adaptable for mounting on small capacity high-speed trucks.

Most of the equipment employed in the construction of new roads is also used in their maintenance. In addition there are chip spreaders and road scrapers. Trucks equipped with compressors for operating pneumatic tools such as concrete breakers

and hammers also have a place in this division as well as under construction. Chip spreaders are truck attachments designed for the quick and even spreading of stones. The spreader illustrated (Fig. 5, page 46) attaches to any standard truck. Stones discharged into the spreader feed into a horizontal spinning disk driven by the wheels of the spreader through chains and gears. Adjustment is provided for controlling flow of material, and width of spread is governed by speed of truck. Keeping the more than 700,000 miles of gravel and dirt roads in condition represents a big job, but the work entailed has been greatly simplified by the use of modern scrapers or graders. Regular scraping prevents deterioration by cutting down ridges, corrugations and by filling pit holes. They are also used for keeping low shoulders flush with the pavement. Scrapers are attachments flexibly hung on truck frames between front and rear wheels. Best work is done between 8 and 12 miles per hour, although for light floating speed can be stepped up to 15 m.p.h. A scraper comprises a spring mounted blade adjustable to various angles of cutting and means for raising and lowering the blade. Hydraulic pressure developed by hand-operated pump is the agency employed in modern units for this purpose, although types are available with mechanical and pneumatic lifts.

Roads and streets get dirty and must be cleaned. Snow and ice are

TURN TO PAGE 90, PLEASE

STUDEBAKER offers the world's lowest priced 2 ton truck chassis + + + and the most powerful 1½ ton chassis ever sold at \$695 + + + both built by Studebaker to its 79-year-old policy of quality above price.

6 CYLINDERS

70

HORSEPOWER

## 1½ TON

130" CHASSIS . . \$695

160" CHASSIS . . \$775

Dual rear wheels and auxiliary springs optional at extra cost

## 2 TON

148" CHASSIS . . \$895

160" CHASSIS . . \$945

136" CHASSIS . . \$945

Dual rear wheels standard. Auxiliary springs optional at extra cost

Prices at the factory

Bumpers extra

## BODIES

Cabs and all standard bodies available with both 1½ and 2 ton chassis including panel, screen, express, stake, canopy, grain, cattle bodies, dumps.

Half-ton Panel or Screen complete units \$895 at the factory

Correspondence with responsible dealers in open territory is invited. Studebaker or Pierce-Arrow truck franchises offer unusual profits.



STUDEBAKER Trucks

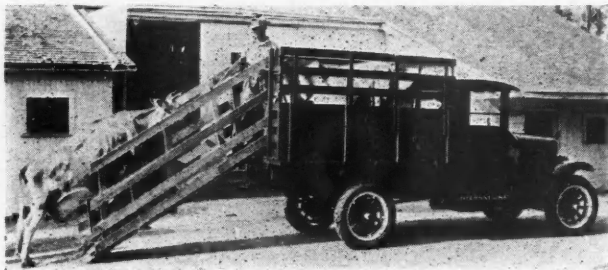


## LIVE STOCK

CONTINUED FROM PAGE 37



Double-decked rack body with side and rear doors for pigs and sheep. Ramp racks are carried



A two-cow capacity stock body on a speed truck. The ramp is a home-made device

ber recorded at the markets. While more trucks are thus employed the distances are shorter. Then, too, there are small packers through the livestock region receiving shipments of which receipts are not available.

It is also interesting to note that more than 16,000,000 truck loads of livestock were delivered to the 17 leading terminal markets during the year and on every business day of the year, it is estimated, more than \$1,500,000 was paid for livestock hauled by truck direct from farms to central markets.

Trucks, it is disclosed, now deliver 27.3 per cent of the total receipts at the 17 markets and 1930's total receipts by truck represents a 15 per cent increase over 1929. It is interesting to note that the number of head of livestock trucked direct from farms to the 17 principal markets increased from 12,193,058 in 1928 to 16,947,083 in 1930 and that, upon analysis, it would have taken no less than 275,000 single deck cars to transport the livestock hauled last year in trucks.

These figures tell a big story. First they indicate definitely the trend of livestock shipments today; secondly, they picture still greater possibilities for the truck industry in the very near future. Not only will the number of trucks employed in this service double, perhaps even triple themselves, if these statistics may be used as a basis of prediction, but each new truck in the field represents a future replacement. A tremendous replacement market—an inspiring prospect.

Chief among the factors responsible for the amazing increase in truck hauls of livestock are the rapid extension of good roads all over the country and the speed and economy of truck transportation. Trucks enable farmers

to haul their livestock direct to the central markets where higher prices prevail and return with loads of fertilizer, lumber, implements, canned goods or other necessities, which make the back haul pay additional profits. Good roads have extended a former average trucking radius of between 25 and 50 miles to hauls up to 300 miles. In the corn-belt states it is conservatively estimated that average livestock haul is upwards of 60 miles.

Trucks ranging in capacity of from one to ten tons are used in this service although there is a preponderance of the lighter units due perhaps to the general farm utility service to which these trucks also are subjected. While not a newcomer, trailers are being used to a greater extent in this field, especially by independent operators, slaughter houses and by some of the larger livestock raisers.

There is another department of livestock hauling that is more specialized and a commission that cannot be undertaken by every truck operator or without special equipment and that is transportation of blooded livestock. Valuable horses and thoroughbred cows demand special attention and care. Bodies designed for this service greatly resemble van bodies, but are almost always furnished with

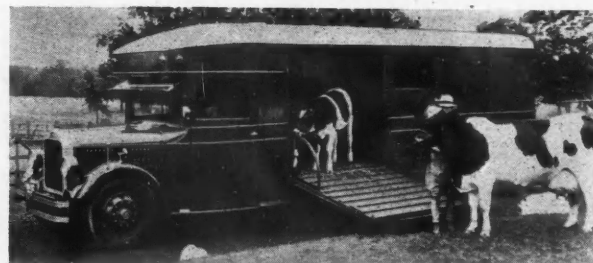
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Stock racks for single or double deck service mounted on a truck and a four-wheel trailer

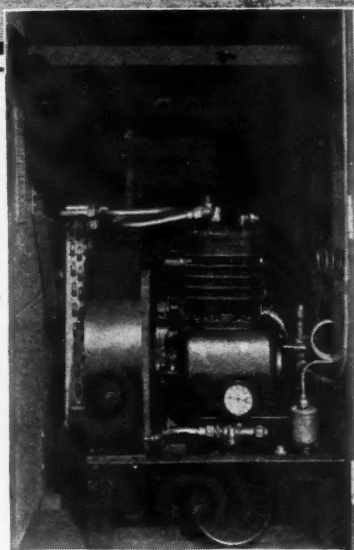


Rack for sheep, hogs or cattle. Extra deck which extends two-thirds the length of the body is used for small stock. Floor level is adjustable. Ramps and racks are carried



Van type body used for transporting blooded stock. Interiors are padded for protection of animals. The side door drops to form a loading ramp. Cleats on ramp give good footing

# PROFITABLE NEWS *about* Mechanical Refrigeration on GENERAL MOTORS TRUCKS!



The Frigidaire is run by a Vari-speed generator which is driven from the power take-off by means of a belt through the floor. The small motor illustrated runs the refrigerating unit when in garage at night.

A very practical installation is also offered in a manually controlled unit in which the Frigidaire is driven by a small Novo gasoline engine.

**T**HIS illustrates how General Motors Truck engineers co-operate with makers of auxiliary equipment to insure profits for the owner—and profitable repeat sales for the dealer.

The "team" you see above was developed to set new records in low-cost distribution of ice cream. It consists of the famed Model T-44 chassis, with mechanically refrigerated body. Sub zero temperature is constantly maintained within the body by the efficient Frigidaire—regardless of time

or distance, under all conditions of roads or weather.

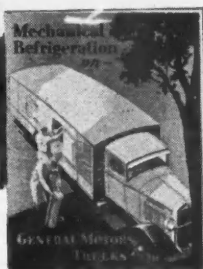
Exhaustive tests in actual operations soundly established the economy

and practicability of the complete unit. In rapid succession ice cream makers are adopting it—entire fleets have been installed.

To help owners make more money with delivery equipment, General Motors Truck engineers bring wide experience and sound knowledge to the development of special units to handle special jobs. *For the man who sells General Motors Trucks this helps insure repeat business—the surest source of stable profits.*

This complete line of modern, 6-cylinder trucks offers today's outstanding opportunity in commercial transportation. Write for complete facts about it.

Coupon brings folder which gives facts and figures on new profits, and savings in distribution costs, obtained by General Motors Trucks with refrigerated bodies. Covers subject thoroughly. Illustrated. No cost or obligation.



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(Subsidiary of Yellow Truck & Coach Mfg. Co.)

GENERAL MOTORS TRUCKS, YELLOW CABS and COACHES.  
Factory Branches, Distributors, Dealers—in over 2200 principal cities and towns. (Time payments financed through our own Yellow Manufacturing Acceptance Corporation, at lowest available rates.)

GENERAL MOTORS TRUCK CO., Dept. 301  
Pontiac, Michigan

Gentlemen: Please send a copy of "Mechanical Refrigeration on General Motors Trucks"—without cost or obligation.

Name.....

Address.....



## TRAILERS

CONTINUED FROM PAGE 21

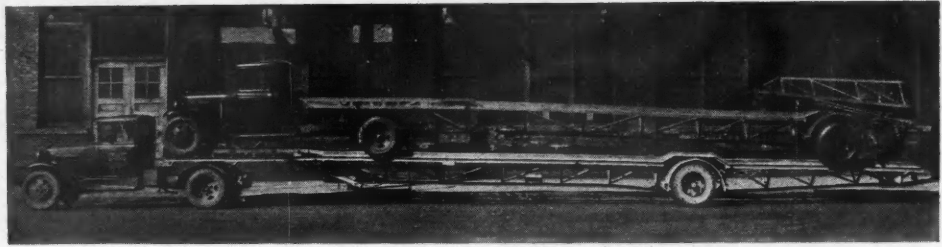


Fig. 5—This long trailer for hauling new automobiles carries its companion on its back on the return trip. Folding body extension keeps length within legal limits

other alternative is to pile the material up along the shipping platform and then load it into trucks in a last-minute rush at closing time.

Saving time of a tractor unit is by no means the only reason for use of semi-trailers. In fact, some semi-trailers with their bodies cost a lot more than the tractor unit which pulls them about. For illustration, many of the large semi-trailer van bodies and refrigerator bodies cost much more than their tractors. Many semi-trailers are never uncoupled from their tractor units except for repairs.

In England, a four-wheel tractor unit and two-wheel semi-trailer are quite frequently considered as a six-wheel vehicle. So common is the idea that this combination makes up a six-wheeler that the term "rigid six-wheeler" is used in England to distinguish a six-wheel truck from a tractor-semi-trailer combination.

The article on six-wheel attachments, which appears on page 30 of this issue, shows that six-wheel trucks are being made in medium-carrying capacities in large numbers. Likewise, semi-trailers are being used to carry loads much less than maximum permitted by state laws. To haul a load of three or four tons, a truck of suitable carrying capacity may be chosen or a truck of nominal carrying capacity of about 1½ tons, with a semi-trailer, may be used. Careful analysis of the operation frequently is required to reveal facts on which a decision may be based.

Semi-trailers are offered in a wide variety of designs and capacities. If they are to be coupled and uncoupled to the tractor unit frequently, they are equipped with dolly wheels to support the forward end when the tractor is uncoupled. These wheels may be raised by impact of the tractor units backing into the semi-trailer, an arrangement which is called an automatic coupler, or the dolly wheels may be raised and lowered by handpower after the tractor is in place. Semi-trailer frames usually are carried along at platform-height, approximately, but, when desired, a

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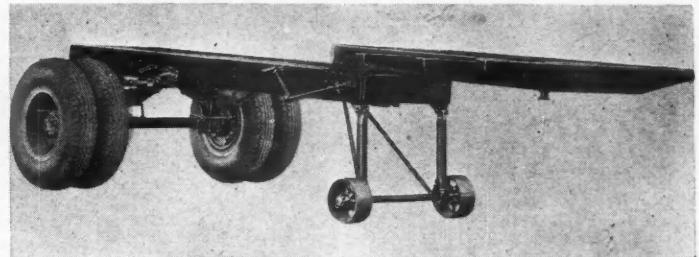


Fig. 6—One of the new line of G.M.T. trailers which incorporates a standardized fifth wheel and drop dolly

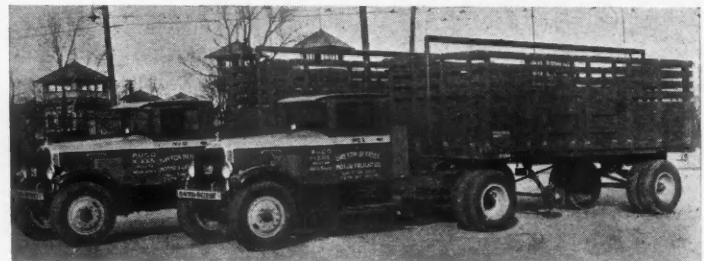


Fig. 7—Open freight type bodies on dual wheel semi-trailers serve both intercity and local freight haulers

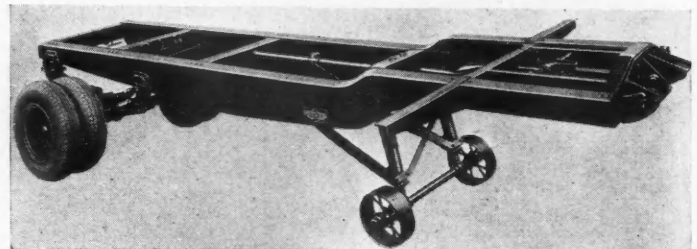


Fig. 8—The new Fruehauf trailers embody automotive type pressed steel drop frames. Note the body outrigger

Fig. 10—Pole trailers are used for ordinary service as well as for moving pipe or poles

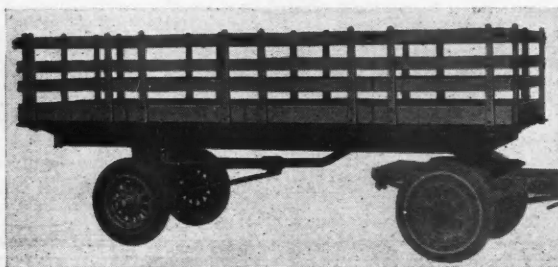
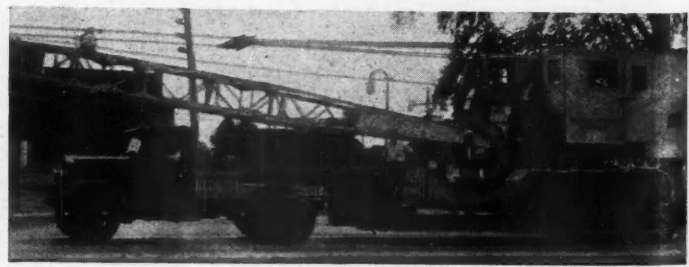
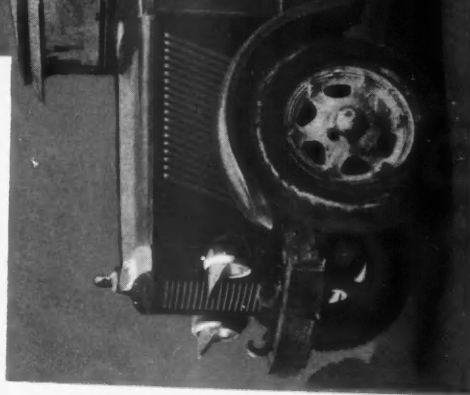


Fig. 9—Heavy-duty drop frame trailers with multiple rear wheels easily load and haul extremely heavy loads



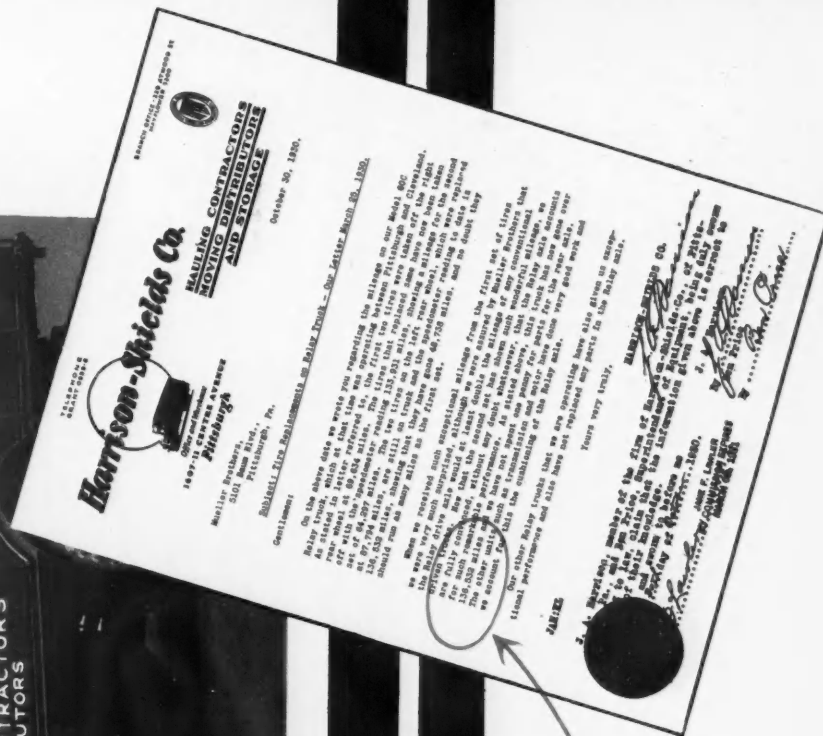
# After



**HARRISON-SHIELDS  
HAULING CONTRACTORS  
DISTRIBUTORS**

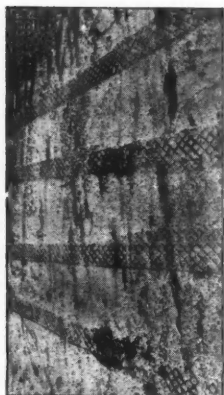
# 136 532 Miles on Two Sets of Tires

**We are fully convinced that the Relay Axle accounts for such remarkable performance.**





# Why RELAY SAVES TIRES



There is no slipping and spinning of the rear wheels when starting because the load moves before the wheels start to turn. As illustrated above, the tread marks left by the Relay (the second and fourth), are clear and distinct as compared with those of the conventional truck (first and third) which must spin in order to gain traction when starting.

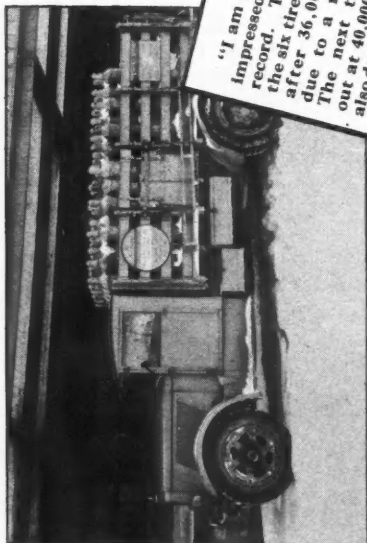


This tire was one of the first set on the truck pictured on the opposite page. It was taken off with a mileage of 87,794. The average for all six of the first set was 74,896.5 which with the mileage of the second set, 61,635, proves that Relay traction does save tires.

# RELAY SAVES

3¢ Per Average Mile

"I am particularly impressed by the record," says the tire salesman. "The first of the six tires went out after 36,000 miles. The next tire went out at 38,000 miles. The next tire went out at 40,000 miles. The other four original tires are still on the truck at 44,000 miles."



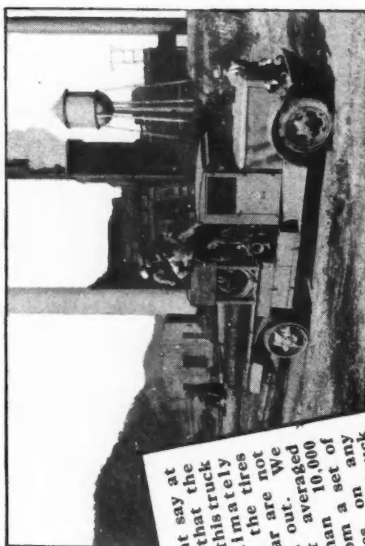
**W. R. Hires**  
**Lima, Ohio**

**"This particular truck is used in hauling milk from our creamery in 100 miles from Pittsburgh, which is 100 miles from the average mileage of the first set of tires was 40,977 miles each. We consider this exceptional mileage."**



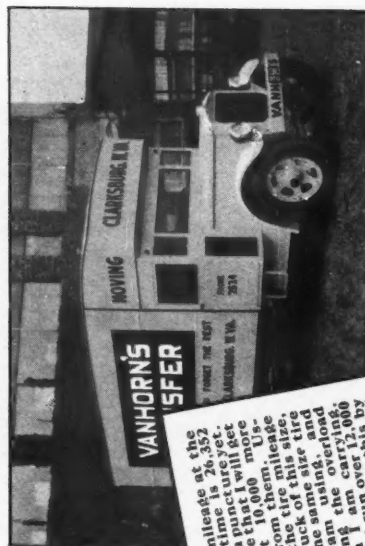
**Tech Food Products Co.**  
**Pittsburgh, Pa.**

"We might say at this time, that the mileage on this truck is approximately 15,000 and the tires on the rear are worn out. We have not 10,000 more than a set of miles from any rear make of truck other than this kind of doing," work.



**Appalachian Electric  
Power Co.  
Charleston, West Va.**

"The mileage at the present time is 26,352 miles. I am sure I will get at least 10,000 miles from this tire size, usually, truck of this size, on a same sized and on a same sized, and with an overloading, as carrying the carry 1000 which I am over by will not know using miles. In 1 type experience on the same can't find the same truck as this 'Relay is wrong."



**Van Horn's Transfer Co.**  
**Clarksburg, West Va.**

**RAY MOTORS CORP.** *Lima, Ohio*

Autocar .....  
Autocar .....  
Autocar .....  
Autocar .....  
Autocar .....  
Brookway .....  
Brookway .....  
Brookway .....  
Brookway .....  
Brookway .....  
Brookway 250 .....  
Chicago 1-78 .....  
Condor .....  
Condor .....  
Condor .....  
Condor .....  
Corbitt .....  
Corbitt .....  
Corbitt .....  
Corbitt .....  
Diamond T .....  
Diamond T .....  
Diamond T. 5 .....  
Diamond T. 5 .....  
Diamond T. 5 .....  
Diamond T. 5 .....  
Federal .....  
Federal .....  
Federal .....  
Federal .....  
Federal .....  
Federal .....  
Freeman BAT .....  
Freeman GLT .....  
(X) Gen. M. 221 .....  
(X) Gen. M. 251 .....  
(X) Gen. Mot. T3 .....  
(X) Gen. M. 335 .....  
(X) Gen. Mot. 4201 .....  
(X) Gen. Mot. 4404 .....  
(X) Gen. Mot. T8 .....  
(X) Gen. M. 7556 .....  
(X) Gen. 6208 .....  
(X) Gen. 676 .....  
(X) G.M.T. 8205 .....  
(X) G.M.T. 8206 .....  
(X) Gen. Mot. T8 .....  
(X) Gen. 9003 .....  
(X) Gen. Mot. T9 .....  
(X) Gen. Mot. T9 .....  
Gramm ..... B118 .....  
Gramm ..... C122 .....  
Gramm ..... D122 .....  
Gramm ..... E118 .....  
Hug .....

# COMMERCIAL CAR JOURNAL

## TABLE OF TRUCK SPECIFICATIONS

Corrected Each Month From Data  
Supplied Direct by Manufacturers

(KEY TO REFERENCES ON PAGE 78)

Tractor truck models previously included in specification tables under a separate heading are here listed in a more compact form. Check of specifications of tractor models showed that almost all of them embody the same major units as truck models.

Chief differences between tractor and truck models are wheelbase rear axle ratio and carrying capacity, which are given in the accompanying columns together with other important facts. Complete information about the tractors may be found by referring to the corresponding truck models listed in the last column.

### Tractor Trucks

Make, Model and Capacity	General			Gear Set			Rear Axle		For Corresponding Truck Model, See Specifications Under Tonnage Noted		
	Chassis Price	Standard W.B.	Gross Vehicle Wt. See Key Note	Chassis Wt. Stripped	Make and Model	Location	No. of Forward Speeds	Aux. Locat. and Speeds		Gear Ratios	
										Reduc. in High	Reduc. in Low
Autocar.....DT	3500	140	20000	5300	B-L 51	U	4	No 6.30	33.7	D-2, 2 1/4	
Autocar.....SHT	4300	104	30000	6770	Own T	U	4	No 8.46	53.6	SH-3	
Autocar.....SCHT	4300	145	30000	6860	Own T	U	4	No 8.46	53.6	SH-3 1/2	
Autocar.....SHST	4800	104	40000	7900	Own T	U	4	No 10.3	65.1	SHS-3 1/2	
Autocar.....SCHST	4800	145	40000	8180	Own T	U	4	No 10.3	65.1	SHS-3 1/2	
Autocar.....FT	6800	153	60000	11000	B-L 70	A	7	No 11.66	109	F-5 1/2	
Brockway.....90	137			3850		U	4	No 5.12	20.9	90-1 1/2	
Brockway.....140	138			5500		U	4	No 6.6	35.3	140-2 1/2	
Brockway.....170	138			6800		U	4	No 6.4	46.6	170-3	
Brockway.....195	138			7500		U	4	No 6.8	49.5	195-4	
Brockway.....220	138			8200		U	4	No 6.96	50.7	220-5	
Brockway.....190	139			7625		U	7	No 7.75	78.6	190-3	
Brockway 250, 5 1/2-TT	146			10000	B-L	U	4	No 8.75	63.7	250-5 1/2	
Brockway 290, 7 1/2-10T	146			10750	B-L	U	7	No 10.1	95.0	290-5 1/2	
Chicago 1-76-D	20T			8740	B-L-60 Max	A	7	No 7.6	77.2		
Condor.....CB	118			3875	Cov A-4 J	U	4	No 7.4	48.8		
Condor.....CC	122			4820	Cov W4J	U	4	No 7.4	48.8		
Condor.....CD	122			5020	Cov W4J	U	4	No 7.4	48.8		
Condor.....CF	118			5200	Cov Rus	U	4	No 6.3	41.0		
Condor.....CGW	153			8950	Cov Rus	U	4	No 6.3	41.0		
Corbitt.....9B6T	139	18000		4200	BL-214	U	4	No 6.8	43.6		
Corbitt.....12B6T	141	20000		4955	BL-51	U	4	No 7.4	48.8		
Corbitt.....15B6T	157	25000		5980	BL-51-5	U	5	No 7.80	46.5		
Corbitt.....18D6T	159	30000		7600	BL-615	U	5	No 7.33	48.0		
Corbitt.....24D6T	165	40000		9200	BL-70	U	7	No 8.15	76.6		
Diamond T.....216-1T	1695	135		3300	War	U	4	No Opt	Opt	216-1	
Diamond T.....303-2T	1745	137		4800	Cov	U	4	No Opt	Opt	303-2	
Diamond T.....504-2 1/2-T	2275	131		6200	Cov	U	4	No Opt	Opt	504-2 1/2	
Diamond T.....551-2 1/2-T	2250	131		5600	Cov	U	4	No Opt	Opt	551-2 1/2	
Diamond T.....603-3T	3300	147		7300	Cov	U	5	No Opt	Opt	603-3	
Diamond T.....750-4T	4800	147		8300	Cov	U	5	No Opt	Opt	750-4	
Federal.....A6TW	2360	140	25000	4890	Own	A	4	No 8.75	52.9	A6TW-2 1/4	
Federal.....T10W	2815	158	32000	6525	Own	A	4	No 8.75	57.0	T10W-3	
Federal.....U6	3860	143	43000	7155	B-L 55	A	7	No 8.75	83.1		
Federal.....4C6A	4735	144	50000	8120	B-L 55	A	7	No 8.67	82.3	4C6A-5	
Federal.....4C6AB	4960	144	50000	8505	B-L 55	A	7	No 8.67	82.3	4C6AB-5	
Federal.....X3	5085	155	65000	9650	B-L 60	A	7	No 11.6	111	X3-5 1/2	
Federal.....XSR	5810	155	65000	9900	B-L 60	A	7	No 11.6	111	XSR-5 1/2	
Freeman BAT-144 7T	6450	144		9800	Ful HU16	U	4	AS 8.53	155	BAS-156 5 1/2	
Freeman GLT-144 7 1/2	7050	144		10500	Ful HU16	U	4	AS 8.53	155	BAS-156 5 1/2	
Gen.M. 2216-2 1/4-T	885	130	14000	2990	Mun	U	4	No 6.8	37.8		
Gen.M. 2513-2 1/2-T	1345	130	14500	3575	Mun	U	4	No 6.8	34.5		
Gen.M. T263-3 1/2-T	1450	130	17000	3600	Mun	U	4	No 6.60	33.5		
Gen.M. 3204-3 1/4-T	1700	141	19000	4705	Mun	U	4	No 6.43	32.7	T-30.3	
Gen.M. 4201-4 5-T	1845	141	20000	4725	Mun	U	4	No 7.14	36.2	T-42.2 1/4	
Gen.M. 4404-5 6 1/4-T	2095	141	25000	5095	Mun	U	4	No 9.45	48.0	T-44.4 1/2	
Gen.M. T515-6 1/4-T	2625	155	25000	6250	Mun	U	4	No 7.14	44.1		
Gen.M. T556-7 1/4-T	2750	155	27500	6300	Mun	U	4	No 9.45	58.4		
Gen.M. 6208-7 1/4-T	3250	154	34000	7150	Mun	U	4	No 10.7	65.9		
Gen.M. T617-8 1/4-T	3525	154	34000	7175	Mun	U	4	No 10.7	65.9		
Gen.Mt. 8205 8 1/2-10	3970	155	37000	7735	Mun	U	12	A 12.3	171		
Gen.Mt. 8206 10-12T	4055	155	45000	7880	Mun	U	12	A 12.3	171	T-82.5 1/2	
Gen.M. T8510-12	4500	171	45000	9515	Ful	U	4	No 10.5	66.1		
Gen.M. T8515-13	5455	185	50000	9775	Mun	U	12	A 10.3	144		
Gen.M. T9615-13	7675	189	60000	11625	Ful	U	4	No 8.5	53.3		
Gen.M. T9615-13	7325	189	60000	11625	Ful	U	4	No 9.11	57.1		
Gramm.....B118 3 Ton	1495	118		3875	Cov A-4J	U	4	No			
Gramm.....C122 4 Ton	1995	122		4820	Cov W4J	U	4	No			
Gramm.....D122 5 Ton	122			5020	Cov W4J	U	4	No			
Gramm.....E118 6 Ton	118			5200	Cov-Rus	U	4	No			
Gramm.....GW	5175	153	44000	8950	Cov-Rus	U	4	No 6.3	41.0	GW-4	
Hug.....98	Op			10750	B-L714,703	U	12	A3	10.26	139	
Indiana.....89	137			3850	B-L	U	4	No 5.12	20.9	89-1 1/2	
Indiana.....140	138			5500	B-L	U	4	No 6.16	35.3	140-2 1/2	
Indiana.....170	138			6800	B-L	U	4	No 6.41	46.6	170-3	
Indiana.....195	138			7500	B-L	U	4	No 6.8	49.5	195-4	
Indiana.....220	138			8200	B-L	U	4	No 6.8	49.5	220-5	
Indiana.....190	139			7625	B-L	U	4	No 7.75	78.6	190-3	
Indiana.....250, 5 1/2-TT	146			10000	B-L	U	4	No 8.15	63.7	250-5 1/2	
Indiana.....290, 7 1/2-10T	146			10750	B-L	A	7	No 10.0	95.0	290-5 1/2	
International.....AW-2	2980			4300	W-G T7	U	4	No 5.29	72.4	AW-2 1 1/2	
International.....A-3	5070	Own A5		5575	Own A-5	U	4	No 6.80	42.9	A-3 1 1/2	
International.....A-5	5575	Own A-5		5575	Own A-5	U	5	No 7.16	52.9		
International.....A-6	5756	Own		5756	Own	U	5	No 8.06	76.8	A-6, 3	
International.....HS-54C	7675	Own		7675	Own	U	5	No 8.85	60.5		
International.....HS-54C	7900	Own		7900	Own	U	5	No 7.22	63.7		
International.....HS-74	8100	Own		8100	Own	U	5	No 6.85	60.5		
International.....HS-74C	9530	Own		9530	Own	U	5	No 7.17	46.1	W-1, 2 1/2	
International.....W-3	9955	Own		9955	Own	U	5	No 8.81	79.1	HS-74C-3 1/2	
International.....HS-104C	10100	Own		10100	Own	U	5	No 7.85	70.5	W-3, 5	
LaFrance Rep.....M-2T	147	20000		7700	Ful VUOG	U	5	No 10.1	90.5	HS-104C-5	
LaFrance Rep.....35-2T	147	24000		9400	Ful HU	U	5	No 8.8	48.2	M-2, 4	
Mack.....BL 2 Ton	2500	138		3000	Own BL	U	4	No 4.86	24.0	BL-1 1/2	
Mack.....AB 3-4 Ton	3500	123		3500	Own AB	U	4	No 8.87	43.0	AB-2	
Mack.....AB 5-6 Ton	3500	123		3500	Own AB	U	4	No 8.87	43.0	AB-2	
Mack.....AB 5-6 Ton	4300	123		4300	Own BC	U	4	No 5.1	24.6	AB-3	
Mack.....BC 6-8 Ton	5250	142		5250	Own BC	U	4	No 6.69	39.1	BC-4	
Mack.....BC 7-10 Ton	5500	142		5500	Own BC	U	4	No 7.17	46.1	BC-4	
Mack.....BJ 7-10 Ton	6150	169		6150	Own BJ	A	4	No 4.25	22.4	BJ-5	
Mack.....A-7 10 Ton	5150	134		5150	Own AC	J	4	No 5.99	38.5	AC-5	
Mack.....AK 7-10 Ton	5250	134		5250	Own AC	A	4	No 5.14	41.1	AK-5	
Mack.....AC 7-15 Ton	6128			6128	Own AC	J	4	No 6.46	41.5	AC-7 1/2	
Mack.....AP 20 Ton	9500			9500	Own AP	J	4	No 6.46	41.5	AP-5 1/2	
Mack AC 20 T. 6Wh.	145			145	Own AP	J	4	No 7.06	45.3	AP-6Wh-10	
Mack AP 20 T. 6Wh.	145			145	Own AP	J	4	No 7.06	45.3	AP-6Wh-10	
Pierce-Arrow.....XB	3750	140		3750	Own XB	A	4	No 9.25	50.2	XB-3	
Pierce-Arrow.....RD	5400	133		5400	Own RD	A	4	No 7.8	41.5		
Pierce-Arrow.....RF	5600	132		5600	Own RF	A	4	No 10.0	51.9		
Relay.....60	4480	142		4480	Own 60	U	4	No 6.45	34.5	40-2	
Relay.....FH	1545		13600	4165	Own	U	5	Op 5.7	72.6	FH-2	
Schacht.....TR, 10 Ton	146	9560		3810	Ful VUOG	U	4	No 6.14	77.8	GD-3	
Stewart.....30	695	110		2977	Cla	U	4	No 5.6	35.8	30-1	
Stewart.....30X	795	110	6305	3018	Cla	U	4	No 5.6	35.8	30X-1	
Stewart.....40	895	110		3350	War	U	4	No 5.6	35.8	40-1 1/2	
Stewart.....40X	995	110		3393	War	U	4	No 5.6	35.8	40X-1 1/2	
Stewart.....24	1195	135		3710	War	U	4	No 5.6	22.0	34X-1 1/2	
Stewart.....28X	1495	130		4058	Ful	U	4	No 6.37	47.0	28X-2	
Stewart.....29X	1695	135	10235	4960		U	4	No 6.37	44.0	29X-2	
Stewart.....32X	1900	148	12135	5230	Ful	U	4	No 7.25	47.6	32X-2 1/2	
Stewart.....18X	2690	148		5901	Ful	U	4	No 7.25	47.6	18X-2 1/2	
Stewart.....35X	2590	149		5880	Ful	U	4	Op 7.1	46.1	35X-3	
Stewart.....19X	3690	147		7110	Ful	U	12	A 7.25	127	19X-3 1/4	
Stewart.....31X	4990	150		8440	Ful	A	8	U 10.5	15.1	31X-5	
Stewart.....27X	5700	150	26677	9897	Ful	U	8	No 6.56	93.8	27X-5 1/4	
Studebaker.....S-40	945	148		3650	WCASI T9	U	4	No 5.83	37.4	S-50-2	
Walter.....FBD	8500	118	26000	9000	Own	U	5	No 8.50	85.1		
Walter.....FBRD	8700	118	31000	10000	Own	U	5	No 8.50	85.1		
Ward La Fra. 75D-15T	Op			10000	B-L70 Max	A	7	No Opt	Opt		
White.....52T	4700	129									



Line Number	Make, Model and Capacity	General				Tire Size		Make and Model	Engine										Fuel System		Electrical System		Line Number				
		Chassis Price	Standard W.B.	Max. W.B. Furnished	Gross Vehicle Wt. (See Key Note)	Chassis Wt. (Stripped)	Front		Rear	Number of Cylinders Bore and Stroke	Piston Displacement	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Valve Arrangement	Camshaft Drive	Piston Material	Dia. Main Bearings	Length Main Bearings	No. Main Bearings	Oiling System	Governor	Carburetor Make		Fuel Feed	Ignition System Make	Generator, Starter Make	
1000 Pounds																											
1	Chevrolet, Ind. Com.	355	109	109	400*	1880	B 4.75/19	B 4.75/19	Own	6-3 1/2 x 3 1/2	194.0	26.3	50-2800	H	G	C	2 1/2	6 1/2	3	PG	No	Car	P	D-R	D-R	1	
2	Dodge Bros., UF-10	435	109	109	4025	1855	B 5.00/19	B 5.00/19	Own	6-3 1/2 x 3 1/2	196	21.0	48-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Car	P	D-R	D-R	2	
3	Dodge Bros., F-10	515	109	109	4125	1960	B 5.25/19	B 5.25/19	Own	6-3 1/2 x 3 1/2	189.8	23.4	61-3400	L	G	C	2 1/2	6 1/2	3	FP	No	Car	P	D-R	D-R	3	
4	Fargo Packet	595	109	109	4125	1935	B 5.00/19	B 5.00/19	Own	6-3 1/2 x 3 1/2	189.8	23.4	61-3400	L	G	C	2 1/2	6 1/2	3	FP	No	Car	P	D-R	D-R	4	
5	Ford, A	340	103	103	3800	1880	B 4.75/19	B 4.50/20	Own A	6-3 1/2 x 3 1/2	200.5	24.0	40-2200	L	G	C	2 1/2	6 1/2	3	FP	No	Car	P	D-R	D-R	5	
6	(X) Gen. Mot. T11	625	109	109	3800	1980	B 5.00/19	B 5.50/19	Pontiac	6-3 1/2 x 3 1/2	200.3	26.3	58-3000	L	G	C	2 1/2	6 1/2	3	PC	No	Mar	M	D-R	D-R	6	
7	(X) Gen. Mot. T-15	695	121	121	6500	2425	B 5.50/20	B 5.50/20	Pontiac	6-3 1/2 x 3 1/2	200.3	26.3	58-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Mar	M	D-R	D-R	7	
8	Paige	895	115	115	4460	2350	B 5.50/19	B 5.50/19	Own	6-3 1/2 x 3 1/2	207	23.4	66-3200	L	G	C	2 1/2	6 1/2	3	FP	No	Mar	M	D-R	D-R	8	
9	Reo, Jr. 16	785	115	115	4460	2330	B 6.00/18	B 6.00/18	Con 19E	6-3 1/2 x 3 1/2	214.7	27.3	60-2500	L	G	C	2 1/2	6 1/2	4	FP	No	Sch	P	D-R	D-R	9	
10	Studebaker	591	114	114	4285	2330	B 5.25/19	B 5.25/19	Own	6-3 1/2 x 3 1/2	221	21.3	70-3200	L	G	C	2 1/2	6 1/2	4	CC	No	Sch	P	D-R	D-R	10	
11	Willis Six, C-113	395	113	113	4000	1872	B 5.00/19	B 5.00/19	Own C-113	6-3 1/2 x 3 1/2	193.0	25.3	65-3400	L	G	C	2 1/2	6 1/2	4	CC	No	Str	Til	M	A-L	11	
1500 Pounds																											
12	Dodge Brothers	695	124	124	4760	2260	B 5.50/20	B 5.50/20	Own	4-3 1/2 x 4 1/2	175.4	21.0	45-2800	L	G	S	2 1/2	6 1/2	3	PC	No	Car	V	D-R	D-R	12	
13	Dodge Brothers	745	124	124	4760	2380	P 30x5	P 30x5	Own	4-3 1/2 x 4 1/2	175.4	21.0	45-2800	L	G	S	2 1/2	6 1/2	3	PC	No	Car	V	D-R	D-R	13	
14	Dodge Brothers	795	124	124	4860	2360	B 5.50/20	B 5.50/20	Own	6-3 1/2 x 3 1/2	208.0	27.3	63-3200	L	G	S	2 1/2	6 1/2	3	PC	No	Car	V	D-R	D-R	14	
15	Dodge Brothers	845	124	124	4860	2480	P 30x5	P 30x5	Own	6-3 1/2 x 3 1/2	208.0	27.3	63-3200	L	G	S	2 1/2	6 1/2	3	PC	No	Car	V	D-R	D-R	15	
16	Fargo Clipper	725	120	120	4600	2340	B 5.50/18	B 5.50/18	Own	6-3 1/2 x 3 1/2	195.6	23.4	48-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Car	V	D-R	D-R	16	
17	Fisher Standard Jr. B.	120	120	120	6000	2650	B 5.50/20	P 30x5	Con W10	4-3 1/2 x 4 1/2	200.5	24.0	48-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Car	V	D-R	D-R	17	
18	Fisher Standard Jr. B.	120	120	120	6000	2650	B 5.50/20	P 30x5	Con W10	4-3 1/2 x 4 1/2	200.5	24.0	48-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Car	V	D-R	D-R	18	
19	(X) Gen. Mot. T15	645	130	141	6500	2625	B 5.50/20	B 5.50/20	Pontiac	6-3 1/2 x 3 1/2	200.3	26.3	58-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Mar	M	D-R	D-R	19	
20	International, Spec. Del	124	124	124	6500	2200	B 5.25/20	B 5.25/20	Wau XA	4-3 1/2 x 4 1/2	173.0	19.6	30-2700	L	G	C	2 1/2	6 1/2	3	PC	No	Zen	V	D-R	D-R	20	
21	International, AW-1	136	136	136	6500	2620	B 5.25/20	B 5.25/20	Wau XA	4-3 1/2 x 4 1/2	173.0	19.6	30-2700	L	G	C	2 1/2	6 1/2	3	PC	No	Zen	V	D-R	D-R	21	
22	Relay	15AA	1370	131	6500	3750	P 30x5	P 30x5	Con 17E	4-3 1/2 x 4 1/2	214.7	27.3	52-2200	L	G	C	2 1/2	6 1/2	3	FP	No	Str	V	D-R	D-R	22	
1 Ton																											
23	Acme	17	1060	136	6400	3100	P 30x5	P 30x5	Con 29L	6-2 1/2 x 4 1/2	185.0	19.8	44-2800	L	G	C	2 1/2	5 1/2	4	FP	No	Til	V	D-R	D-R	23	
24	Atterbury	A	132	145	7000	3400	P 30x5	P 30x5	Lyc WTG	6-3 1/2 x 4 1/2	201.4	21.6	64-2800	L	G	C	2 1/2	5 1/2	4	CC	No	Zen	V	D-R	D-R	24	
25	Brockway	60	132	141	6000	3200	P 30x5	P 30x5	Con	6-3 1/2 x 4 1/2	214.7	27.3	61-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	25	
26	Brockway	65	137	141	6500	3400	P 30x5	P 30x5	Con	6-3 1/2 x 4 1/2	248.2	27.3	65-2700	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	26	
27	Commerce	S-11	1600	142	162	8000	3900	P 30x5	P 30x5	Bud HS6	6-3 1/2 x 4 1/2	241.6	27.3	53-2200	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	27
28	Condor	CAV6	131	138	8000	3554	B 6.00/20	P 30x5	Con 25A	6-3 1/2 x 4 1/2	214.7	27.3	61-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Til	V	D-R	D-R	28	
29	Day Elder	60	1195	135	6000	3200	B 6.00/20	B 6.00/20	Con 25A	6-3 1/2 x 4 1/2	214.7	27.3	61-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	29	
30	Diamond T	216	695	135	8000	3300	B 6.50/20	B 6.50/20	Her JXA	6-3 1/2 x 4 1/2	224.7	27.3	56-2400	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	30	
31	Dodge Brothers	810	133	133	5840	2470	P 34x5	P 30x5	Own	4-3 1/2 x 4 1/2	175.4	21.0	45-2800	L	G	S	2 1/2	6 1/2	3	PC	No	Car	V	D-R	D-R	31	
32	Dodge Brothers	910	133	133	5940	2570	P 30x5	P 30x5	Own	6-3 1/2 x 3 1/2	208.0	27.3	63-3200	L	G	S	2 1/2	6 1/2	3	PC	No	Car	V	D-R	D-R	32	
33	Douglas	A6	1095	135	145	7500	3070	P 30x5	P 30x5	Bud J214	6-3 1/2 x 4 1/2	214.7	27.3	61-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	33
34	Fargo Freight	795	144	162	7500	3450	P 30x5	P 30x5	Own	6-3 1/2 x 4 1/2	214.7	27.3	60-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Str	V	D-R	D-R	34	
35	Fisher Standard, 10A	120	128	128	2800	3400	P 30x5	P 30x5	Con 17E	4-3 1/2 x 4 1/2	214.7	27.3	60-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	35	
36	Fisher Standard, BX	120	128	128	2800	3400	P 30x5	P 30x5	Con W10	4-3 1/2 x 4 1/2	200.4	24.0	48-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	36	
37	Garford	S-11	1600	142	162	8000	3900	P 30x5	P 30x5	Bud HS6	6-3 1/2 x 4 1/2	241.6	27.3	53-2200	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	37
38	(X) Gen. Mt. T15 or T17	675	130	141	6500	2670	B 7.00/20	B 7.00/20	Pontiac	6-3 1/2 x 3 1/2	200.3	26.3	58-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Mar	M	D-R	D-R	38	
39	Gramm	AX4	795	131	8000	3350	B 6.00/20	B 6.50/20	Con W-10	4-3 1/2 x 4 1/2	200.4	24.0	50-2800	L	G	C	2 1/2	6 1/2	3	FP	No	Til	V	D-R	D-R	39	
40	Gramm	AX-6	895	131	8000	3550	B 6.00/20	B 6.50/20	Con 25A	6-3 1/2 x 4 1/2	214.7	27.3	61-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Til	V	D-R	D-R	40	
41	Gramm-Bernstein, 10	129	146	146	7000	3100	B 6.00/20	DB6.20/20	Lyc CT	4-3 1/2 x 5	220.9	22.5	43-2350	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	41	
42	Hahn & Selden	7	124	141	6000	3100	P 30x5	P 30x5	Con 29L	6-2 1/2 x 4 1/2	185.0	19.8	45-2300	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	42	
43	Indiana	60	132	141	6000	3200	P 30x5	P 30x5	Con	6-3 1/2 x 4 1/2	214.7	27.3	61-3000	L	G	C	2 1/2	6 1/2	3	FP	No	Zen	V	D-R	D-R	43	
44	Indiana	64	137	149	6500	3400	P 30x5	P 30x5	Con	6-3 1/2 x 4 1/2	248.2	27.3	65-2700	L	G	C	2 1/2	6 1/2	3	FP	No	Str	V	D-R	D-R	44	
45	Int. 6 Sp. Spec.	70	137	149	6500	3450	P 30x5	P 30x5	Wau XA	4-3 1/2 x 4 1/2	173.0	19.6	30-2700	L	G	C	2 1/2	6 1/2	3	PC	No	Zen	V	D			

Line Number	Clutch	Gear Set	Type and Make	Make and Model	Location	No. of Forward Speeds	Aux. Locat. and Speeds	Universal Make and No.	Make and Model	Rear Axle		Front Axle		Brakes		Frame		Body Mounting Data		Springs		Auxiliary Type	Line Number					
										Final Drive and Type	Drive and Torque	Gear Ratios	Reduce. in High	Reduce. in Low	Make and Model	Service	Area Service Brakes	Hand	Steering Gear Make	Dim. Side Rail	Type			Cap to Rear of Frame	Cap to Rear Axle	Width of Frame	Front	Rear
1	Har	P.Own	Own Ind.	U	3	No	Own	Own Int.	S	U	4.1	13.6	Own Ind.	O41M	101	21	Own	5x2 1/2 x 5 1/2	C	53%	28 1/2	36x1 3/4	54x1 3/4	N	1			
2	Fed	P.B.&B	Own	U	3	No	Own	Own	S	H	4.66	14.3	Own	L41H	114	TX	War	5x1 1/2 x 5 1/2	C	53%	26 1/2	35 1/2 x 1 3/4	53 1/2 x 1 3/4	N	2			
3	Fed	P.B.&B	Own	U	3	No	Own	Own	S	H	4.66	14.3	Own	L41H	114	TX	War	5x1 1/2 x 5 1/2	C	53%	26 1/2	35 1/2 x 1 3/4	53 1/2 x 1 3/4	N	3			
4	Own	D.Own	Own	U	3	No	Own	Own	S	U	4.7	14.3	Own	O41M	200	21	War	5x1 1/2 x 5 1/2	C	53%	26 1/2	35 1/2 x 1 3/4	53 1/2 x 1 3/4	N	4			
5	Own	P.Own	Pontiac	U	3	No	Own	Pontiac	S	U	4.7	14.3	Own	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	68%	39	36x2	50 1/2 x 2 1/2	N	5			
6	Lon	P.Own	Own	U	3	No	Own	Own	S	H	4.7	14.3	Own	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	68%	39	36x2	50 1/2 x 2 1/2	N	6			
7	Lon	P.Own	W-G	U	3	No	Own	Sal	S	H	4.7	14.3	Own	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	68%	39	36x2	50 1/2 x 2 1/2	N	7			
8	Lon	P.Own	W-G	U	3	No	Own	Sal	S	H	4.7	14.3	Own	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	68%	39	36x2	50 1/2 x 2 1/2	N	8			
9	Har	P.B.&B	W-G	U	3	No	Own	Sal	S	H	4.7	14.3	Own	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	68%	39	36x2	50 1/2 x 2 1/2	N	9			
10	McC	P.Own	W-G	U	3	No	Own	Sal	S	H	4.7	14.3	Own	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	68%	39	36x2	50 1/2 x 2 1/2	N	10			
11	Fed	P.B.&B	Own	U	3	No	Own	Own	S	H	4.89	13.2	Own	B41M	147	41	Own	5 1/2 x 2 1/2 x 5 1/2	C	93%	53	36x1 3/4	51x1 3/4	N	11			
																						1000 Pounds						
12	Fed	P.B.&B	W-G	U	3	No	Spl	Own	S	H	5.63	21.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	12		
13	Fed	P.B.&B	W-G	U	3	No	Spl	Own	S	H	5.63	21.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	13		
14	Fed	P.B.&B	W-G	U	3	No	Spl	Own	S	H	5.11	19.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	14		
15	Fed	P.B.&B	W-G	U	3	No	Spl	Own	S	H	5.11	19.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	15		
16	Lon	P.Own	Own	U	3	No	Own	Own	S	H	5.11	19.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	16		
17	Lon	P.Own	B-L T-9	U	4	No	Blo 2	Sal F	S	H	5.37	34.4	Sal F	L41H	362	TX	Ros	6 1/2 x 2 1/2 x 6 1/2	C	84	47	32	40x2	54x2 1/2	N	17		
18	Lon	P.Own	B-L 214	U	4	No	Blo 2	Sal F	S	H	5.37	34.4	Sal F	L41H	362	TX	Ros	6 1/2 x 2 1/2 x 6 1/2	C	84	47	32	40x2	54x2 1/2	N	18		
19	Lon	P.Own	Own	U	3	No	M.M.	Tim 51500	S	H	4.86	16.1	Tim 11709	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	87	48	34	38x2	50 1/2 x 2 1/2	N	19		
20	Lon	Roc	M.M.	U	3	No	M.M.4	Eat 502	S	H	4.45	15.1	Eat 200F	BE41M	256	21	Ros	4 1/2 x 1 3/4 x 6 1/2	C	86%	50	32	40x2	52x2	N	20		
21	Mod	Roc	MM-O	U	3	No	M.M.4	Own 600	S	H	4.45	15.1	Own 100	B41M	212	21	Ros	4 1/2 x 1 3/4 x 6 1/2	C	93%	53	32	40x2	52x2	N	21		
22	Lon	P.B.&B	W-G T-9	U	4	No	Blo	Own	S	H	6.00	38.7	Col 5540	L41H	297	FX	Han	6x2 1/2 x 6 1/2	C	96	55	34	36x2 1/2	48x2 1/2	N	22		
																						1500 Pounds						
23	Fed	P.B.&B	W-G	U	3	No	Spl	Own	S	H	5.63	21.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	23		
24	Fed	P.B.&B	W-G	U	3	No	Spl	Own	S	H	5.63	21.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	24		
25	Fed	P.B.&B	W-G	U	3	No	Spl	Own	S	H	5.11	19.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	25		
26	Lon	P.Own	Own	U	3	No	Own	Own	S	H	5.11	19.2	Own	L41H	189	TX	Han	6x2 1/2 x 6 1/2	C	66%	31	37 1/2	39x2	48x2 1/2	N	26		
27	Lon	P.B.-L	B-L 20	U	4	No	Blo	Col 54028	SF	H	5.1	25.5	Col 5530	L41H	297	FX	Han	6x2 1/2 x 6 1/2	C	103 1/2	63	34	36x2 1/2	48x2 1/2	N	27		
28	Per	D.Jon	W-G T9	U	4	No	Blo	Tim53200BF	BF	H	5.66	36.3	Tim 3000	L41H	380	FD	Ros	6x2 1/2 x 6 1/2	C	81 1/2	51	34	36x2 1/2	45x2 1/2	N	28		
29	G&O	P.B.&B	W-G T9	U	4	No	Spl	Tim	SF	H	5.6	36.3	Tim	B41M	241	41	Ros	5 1/2 x 3 1/2 x 6 1/2	C	106 1/2	58	34	40x2 1/2	54x2 1/2	N	29		
30	G&O	P.B.&B	W-G	U	4	No	Spl	Cla B375	BF	H	5.6	36.3	Own	L41H	252	TX	Ros	6 1/2 x 2 1/2 x 6 1/2	C	93	51	34	42x2	50x2 1/2	N	30		
31	Fed	P.B.&B	W-G	U	4	No	Spl	Own	SF	H	5.6	36.3	Own	L41H	206	TX	Han	6 1/2 x 2 1/2 x 6 1/2	C	85%	50	37	39x2	48x2 1/2	N	31		
32	Mod	P.B.&B	W-G T9	U	4	No	M.M.	Cla B370	SF	H	5.6	36.3	Cla F208	L41H	377	FX	Ros	5 1/2 x 3 1/2 x 6 1/2	C	86%	58	34	39 1/2 x 2	49 1/2 x 2	N	32		
33	Own	P.Own	Own	U	4	No	U-P	Cla	SF	H	5.67	37.2	Own	L41H	380	TX	Ros	6x2 1/2 x 6 1/2	C	106	68 1/2	32	40x2	54x2 1/2	N	33		
34	Own	P.B.-L	B-L 214	U	4	No	Blo 3	Tim 52200H	SF	H	5.83	37.4	Tim 11703H	B41M	362	TX	Ros	6 1/2 x 2 1/2 x 6 1/2	C	103	63	34	36x2 1/2	48x2 1/2	N	34		
35	Lon	P.Own	War T9	U	4	No	Spl	Sol F	SF	H	3.3	17.1	Col 5530	L41H	297	FX	Han	6x2 1/2 x 6 1/2	C	84	47	32	40x2	54x2 1/2	N	35		
36	Lon	P.B.-L	B-L 20	U	4	No	Blo	Col 54028	SF	H	5.1	25.5	Col 5530	L41H	297	FX	Han	6x2 1/2 x 6 1/2	C	103 1/2	63	34	36x2 1/2	48x2 1/2	N	36		
37	Lon	P.Own	Own	U	3	No	M.M.	Tim 51505	S	H	4.86	16.1	Tim 11709	B41M	308	41	Jac	6x2 1/2 x 6 1/2	C	87	48	34	38x2	50 1/2 x 2 1/2	N	37		
38	Lon	D.Jon	W-G T9	U	4	No	Blo	Tim	S	H	5.66	36.3	Tim	L41H	380	FD	Ros	6x2 1/2 x 6 1/2	C	81 1/2	51	34	36x2 1/2	45x2 1/2	N	38		
39	Per	D.Jon	W-G T9	U	4	No	Blo	Tim	S	H	5.66	36.3	Tim	L41H	380	FD	Ros	6x2 1/2 x 6 1/2	C	81 1/2	51	34	36x2 1/2	45x2 1/2	N	39		
40	Per	D.Jon	W-G T9	U	4	No	Blo	Tim	S	H	5.66	36.3	Tim	L41H	380	FD	Ros	6x2 1/2 x 6 1/2	C	81 1/2	51	34	36x2 1/2	45x2 1/2	N	40		
41	Own	D.Ful	Ful DU-10	U	3	No	Blo	Tim 52200H	BF	H	4.86	20.8	Tim 11703H	L41H	230	TX	Ros	5 1/2 x 2 1/2 x 6 1/2	C	97	57	30 1/2	38x2	50x2 1/2	N	41		
42	G&O	P.B.&B	W-G	U	3	No	Blo	Tim 52000 H	BF	R	H	5.59	19.8	Tim 11703 H	L41H	230	TX	Ros	5 1/2 x 2 1/2 x 6 1/2	C	86	56	34	41x2 1/2	50x2 1/2	N	42	
43	G&O	P.B.&B	War	U	3	No	Spl 2	Col	S	H	5.59	19.8	Col	B41M	244	TX	Ros	5 1/2 x 2 1/2 x 6 1/2	C	90	52	34	37x2 1/2	52x2 1/2	N	43		
44	Lon	Roc	M.M.	U	3	No	M.M.4	Eat 1124	SF	H	5.29	27.2	Eat 430F	BE41M	292	21	Ros	6x2 1/2 x 6 1/2	C	86%	50	32	40x2	52x2 1/2	N	44		
45	Per	P.B.-L	B-L 214	U	4	No	Spl 4	Cla B370	SF	H	5.4	34.6	Cla F208	L41H	220	TX	Ros	5 1/2 x 3 1/2 x 6 1/2	C	96	58	34 1/2	40x2 1/2	52 1/2	N	45		
46	G&O	P.B.&B	Ful Wo-BB	U	4	No	S-P 3	Tim 51000 H	SF	H	5.86	36.1	Tim 11710-H	L41H	380	TX	Ros	6x2 1/2 x 6 1/2	C	98	56	32	38x2	52 1/2 x 2 1/2	N	46		
47	G&O	P.B.&B	Ful Wo-BB	U	4	No	S-P 3	Tim 51000 H	SF	H	5.86	36.1	Tim 11710 H	L41H	380	TX	Ros	6x2 1/2 x 6 1/2	C	98	56	32	38x2	52 1/2 x 2 1/2	N	47		
48	Own	P.Own	Own	U	3	No	Spl 2	Tim 52200H	BF	H	6.85	31.1	Tim 11703H	L41H	362	TX	Ros	6x2 1/2 x 6 1/2	C	103 1/2	63	34	36x2 1/2	48x2 1/2	N	48		
49	Own	P.Own	Own	U	3	No	Blo	Tim 52000	SF	H	6.85	31.1	Tim 11703H	L41H	362	TX	Ros	6x2 1/2 x 6 1/2	C	103 1/2	63	34	36x2 1/2	48x2 1/2	N	49		
50	Lon	P.B.&B	W-G T-9	U	4	No	Blo	Own	2R	H	6.00	38.4	Col 5540	L41H	297	FX	Han	6x2 1/2 x 6 1/2	C	103 1/2	63	34	36x2 1/2	48x2 1/2	N	50		
51	Lon	P.B.-L	B-L 20	U	4	No	Blo	Own 20B	2R	H	5.14	25.5	Col 5530	L41H	297	FX	Han	6x2 1/2 x 6 1/2	C	103 1/2	63	34	36x2 1/2	48x2 1/2	N	51		
52	Own	P.Own	Clark	U	4	No	Cle	Own	S	H	5.2	34.1	Own	L41H	280	TX	Ros	6 1/2 x 3 1/2 x 6 1/2	C	97	52	40 1/2	38x2	50x2 1/2	N	52		
53	Own	P.Own	Clark	U	4	No	Cle	Own	S	H	5.2	34.1	Own	L41H	280	TX	Ros	6 1/2 x 3 1/2 x 6 1/2	C	97	52	40 1/2	38x2	50x2 1/2	N	53		
54	McC	P.B.&B	War	U	3	No	Blo	Adams	SF	H	4.7	15.6	Adams	S41M	178	41	War	5 1/2 x 2 1/2 x 6 1/2	C	52 1/2	26	41 1/2	36x1 3/4	55x2	N	54		
55	Fed	P.B.-L	B-L 20	U	4	No	Blo	Col 54028	SF	H	5.1	25.5	Col 5530	L41H	297	FX	Han	6x2 1/2 x 6 1/2	C	103 1/2	63	34	36x2 1/2	48x2 1/2	N	55		
56	Fed	P.B.&B	Cla	U	4	No	Spl	Sal	SF	H	5.6	35.8	Sal	B41M	206</													



Line Number	Make, Model and Capacity	General			Tire Size		Engine	Fuel System	Electrical System	Line Number																		
		Chassis Price	Standard W.B.	Max. W.B. Furnished	Gross Vehicle Wt. (See Key Note)	Chassis Wt. (Stripped)																						
1½ Ton—Cont'd																												
1	Fisher-Standard 17A	156	186	10000	4300	P 30x5	DP30x5	Con S4	4-4¼x4¼	255.3	28.9	50-2200	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	1				
2	Fisher-Standard Spec X	128	136	3150	5300	P 30x5	DP30x5	Con W10	4-4¼x4¼	200.4	24.0	40-2000	H	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	2				
3	F.W.D.	3325	120	160	9300	2723	B6.00/20	P34x7	4-4½	251.0	25.6	40-2000	H	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	3				
4	Ford	495	131	157	7800	2811	B6.00/20	P32x6	4-3¼x4¼	200.5	24.0	40-2200	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	4				
5	Garford	40	2900	168	4000	4700	P 34x5	DP34x5	4-3¼x4¼	309.6	31.5	53-2200	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	5				
6	Garford	8	11	1900	162	4300	P 30x5	DP30x5	4-3¼x4¼	241.6	27.3	53-2200	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	6				
7	(X) Gen. Mot. T-19	745	130	152	8500	2850	B 5.50/20	P 32x6	4-3¼x4¼	200.3	26.8	58-3000	H	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	7				
8	(X) Gen. Mot. T-25	1245	130	152	9000	3385	B 6.00/20	DP30x5	4-3¼x4¼	257.5	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	8				
9	Gotfredson	RB 36	146	168	4000	3700	P 32x5	DP32x5	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	9				
10	Gramm	BX4	895	131	157	10000	3525	B 6.00/20	DP30x5	200.4	24.0	50-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	10				
11	Gramm	BX-6	995	131	157	10000	3725	B 6.00/20	DP30x5	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	11				
12	Gramm-Bernstein	J	146	168	9200	3980	B 5.50/20	DP30x5	4-3¼x4¼	214.7	27.3	62-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	12				
13	Hahn & Seiden	17	142	7900	3750	P 32x6	P 32x6	Con 18E	4-3¼x4¼	214.7	27.3	66-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	13				
14	Hahn	317H	142	7900	3900	P 32x6	P 32x6	Con 16C	4-3¼x4¼	214.7	27.3	66-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	14				
15	Indiana	111	129	165	9000	3600	P 30x5	P 32x6	4-3¼x4¼	255.0	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	15				
16	Indiana	89	149	168	9000	4050	P 32x6	P 32x6	4-3¼x4¼	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	16				
17	International	AW-2	136	136	10000	2980	B 5.50/20	P 30x5	4-3¼x4¼	173	19.0	50-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	17				
18	International	SL-34	160	160	10000	3595	P 30x5	P 30x5	4-3¼x4¼	221.0	22.5	43-2350	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	18				
19	International	SL-34	160	160	10000	3520	P 30x5	P 32x6	4-3¼x4¼	221.0	22.5	43-2350	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	19				
20	International	SL-36	160	160	10000	3645	P 30x5	P 32x6	4-3¼x4¼	224.0	25.3	61-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	20				
21	International	SL-36	160	160	10000	3570	P 30x5	P 32x6	4-3¼x4¼	224.0	25.3	61-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	21				
22	International	AL-3	135	164	10000	4300	B 6.00/20	DP30x5	4-3¼x4¼	224.0	25.3	61-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	22				
23	Kenworth	85	1550	140	152	10100	3700	P 30x5	DP30x5	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	23				
24	Kleber	51	1200	140	725	3300	P 30x5	P 32x6	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	24				
25	LaFrance-Republic	C-1	144	175	7500	4600	P 32x6	P 32x6	4-3¼x4¼	224.0	25.3	61-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	25				
26	Lange	2225	140	172	9300	4600	B 7.00/20	P 32x6	4-3¼x4¼	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	26				
27	Larrabee	R	2225	140	172	9300	4600	B 7.00/20	P 32x6	4-3¼x4¼	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	27			
28	LeMoon	HB17	2000	163	190	10000	3900	P 32x6	DP32x6	248	27.3	65-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	28				
29	Macar	36200	1950	154	171	10100	4800	P 32x6	DP32x6	248	27.3	65-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	29				
30	Macar	36A	1900	155	171	10100	4800	P 32x6	DP32x6	248	27.3	65-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	30				
31	Macar	36A	1900	155	171	10100	4800	P 32x6	DP32x6	248	27.3	65-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	31				
32	Macar	36A	1900	155	171	10100	4800	P 32x6	DP32x6	248	27.3	65-2800	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	32				
33	Netco	A	144	168	7000	4000	B 6.00/20	DP30x5	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	33				
34	Relay	S	11	1900	162	4300	P 30x5	DP30x5	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	34				
35	Relay	FA-137	1295	137	7900	3525	B 5.50/20	P 32x6	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	35				
36	Reo	137	1295	137	7900	3525	B 5.50/20	P 32x6	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	36				
37	Reo	137	1295	137	7900	3525	B 5.50/20	P 32x6	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	37				
38	Reo	137	1295	137	7900	3525	B 5.50/20	P 32x6	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	38				
39	Rugby	6-15	865	136	170	7150	2850	B 5.50/20	P32x6	4400	B 6.00/20	DP30x5	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	39
40	Schaech	10	142	7900	3900	P 32x6	P 32x6	Con 16C	4-3¼x4¼	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	40				
41	Selden	317	142	7900	3900	P 32x6	P 32x6	Con 16C	4-3¼x4¼	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	41				
42	Service	40	2990	168	4000	4700	P 34x5	DP34x5	4-3¼x4¼	309.6	31.5	53-2200	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	42				
43	Service	811	1900	162	4300	P 30x5	DP30x5	Bud HS6	4-3¼x4¼	241.6	27.3	53-2200	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	43				
44	Stearns	DB7-64	895	137	160	7000	3355	P 32x6	DP32x6	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	44				
45	Stewart	40	895	130	160	7000	3355	P 32x6	DP32x6	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	45				
46	Stewart	40X	995	130	160	7000	3355	P 32x6	DP32x6	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	46				
47	Stewart	34X	1195	145	176	7535	3710	B 5.50/20	DP30x5	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	47				
48	Studebaker	8-20	695	130	160	7535	2985	B 6.00/20	P 32x6	4400	B 6.00/20	DP30x5	4-3¼x4¼	214.7	27.3	61-3000	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	48
49	White	6-21	2600	160	1000	11000	4695	P 32x6	DP32x6	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L	A-L	49				
50	Wichita	1-103	825	131	131	7000	2848	B 5.50/20	P 30x5	248.2	27.3	65-2700	L	C	C	8¾	3	FP	No	Zen	V	A-L						

Line Number	Clutch		Gearset		Rear Axle		Front Axle		Brakes		Frame		Body Mounting Data		Springs		Line Number								
	Type and Make	Make and Model	Location	No. of Forward Speeds	Aux. Locat. and Speeds	Universal Make and No.	Make and Model	Final Drive and Type	Drive and Torque	Reduc. in High	Reduc. in Low	Make and Model	Service	Area Service Brakes	Hand	Steering Gear Make	Dim. Side Rail	Type	Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	Front	Rear	Auxiliary Type	
1	Lon	P.B-L	B-L 314	4	No	Blo 3	Tim 54200H	SF	R 5.83	38.5	Tim 14703H	L4IH	452	TX	Ros	6x2 1/4 x 1 1/2	C	130	80 1/2	32	40x2	54x3	54x3	N	1
2	Lon	P.Lon	War T9	4	No	Spl	Tim 52200H	SF	H 5.83	35.9	Tim 14703H	L4IH	252	TX	Ros	6 1/2 x 2 1/4 x 1 1/2	C	92	55 1/2	32	40x2	54x3	54x3	N	2
3	Per	D.Det	Cot A	4	No	Own	Own	SF	U 6.6	42.2	Own	O4IM	358	FX	Own	6x2 1/4 x 1 1/2	C	81 1/2	51 1/2	38 1/2	30 1/2 x 2 1/2	36x2 1/2	36x2 1/2	N	3
4	Own	P.Lon	Own	4	No	Own	Own	SF	U 6.6	42.2	Own	O4IM	358	FX	Own	6x2 1/4 x 1 1/2	C	81 1/2	51 1/2	38 1/2	30 1/2 x 2 1/2	36x2 1/2	36x2 1/2	N	4
5	Own	P.Lon	Own	4	No	Own	Own	SF	U 6.6	42.2	Own	O4IM	358	FX	Own	6x2 1/4 x 1 1/2	C	81 1/2	51 1/2	38 1/2	30 1/2 x 2 1/2	36x2 1/2	36x2 1/2	N	5
6	Lon	D.B-L	B-L 35	4	No	Blo	Tim 63702	WF	U 6.5	34.8	Tim 14704 H	L4IH	294	FX	Han	6x2 1/4 x 1 1/2	C	144	90	34	40x2 1/2	50x3	50x3	N	6
7	Lon	P.B-L	B-L 20	4	No	Blo	Tim 54000	SF	H 5.83	29.2	Col 5530	L4IH	397	FX	Han	6x2 1/4 x 1 1/2	C	133 1/2	83	34	36x2 1/2	48x2 1/2	48x2 1/2	N	7
8	Lon	P.Own	Mun	4	No	Spl	Tim 5261	SF	H 5.83	34.5	Tim 11710	B4IM	377	TX	Jac	6x2 1/4 x 1 1/2	C	87	48	34	38x2	50 1/2 x 2 1/2	50 1/2 x 2 1/2	N	8
9	Lon	D.Own	Mun	4	No	Spl	Tim 52000H	SF	H 5.83	34.5	Tim 11710	B4IM	377	TX	Jac	6x2 1/4 x 1 1/2	C	87	48	34	38x2	50 1/2 x 2 1/2	50 1/2 x 2 1/2	N	9
10	Lon	D.B-L	B-L 20-4	4	No	Spl	Tim 52000H	SF	H 5.83	34.5	Tim 11710	B4IM	377	TX	Jac	6x2 1/4 x 1 1/2	C	87	48	34	38x2	50 1/2 x 2 1/2	50 1/2 x 2 1/2	N	10
11	Per	D.Jon	W-G T9	4	No	Blo	Tim	SF	H 5.66	36.3	Tim	L4IH	380	FD	Ros	6x2 1/4 x 1 1/2	C	81 1/2	51 1/2	32	36x2 1/2	45x2 1/2	45x2 1/2	N	11
12	Per	D.Jon	W-G T9	4	No	Blo	Tim	SF	H 5.66	36.3	Tim	L4IH	380	FD	Ros	6x2 1/4 x 1 1/2	C	81 1/2	51 1/2	32	36x2 1/2	45x2 1/2	45x2 1/2	N	12
13	You	D.B-L	B-L 214	4	No	Spl	Tim 52200 H	SF	H 5.83	37.4	Tim 12703 H	L4IH	308	TX	Ros	6x2 1/4 x 1 1/2	C	118 1/2	73 1/2	34	42x2 1/2	50x2 1/2	50x2 1/2	N	13
14	Chl	D.B-L	B-L 20	4	No	Blo	Tim 52000 H	SF	H 5.83	37.4	Tim 12703 H	L4IH	380	TX	Ros	6x2 1/4 x 1 1/2	C	110	66	34	41x2 1/2	50x2 1/2	50x2 1/2	N	14
15	Chl	D.B-L	B-L 35	4	No	Spl	Tim K	SF	H 5.5	26.4	Shu	K2IM	432	TX	Ros	5 1/2 x 2 1/4 x 1 1/2	C	110	66	34	41x2 1/2	50x2 1/2	50x2 1/2	N	15
16	McC	P.B&B	B-L	4	No	Spl	Col	SF	H 5.12	20.8	Col	C4IM	292	TX	Ros	5 1/2 x 2 1/4 x 1 1/2	C	99	54	34	40x2 1/2	54x2 1/2	54x2 1/2	N	16
17	Lon	P.B&B	B-L	4	No	Spl	Col	SF	H 5.12	20.8	Col	C4IM	292	TX	Ros	5 1/2 x 2 1/4 x 1 1/2	C	114	68	34	37x2 1/2	52x2 1/2	52x2 1/2	N	17
18	Lon	Roc	M.M.	3	No	M.M.4	Own 700	SF	H 5.29	72.4	Own 100	BE4IM	292	TX	Ros	5 1/2 x 2 1/4 x 1 1/2	C	93 1/2	53 1/2	32	40x2	46x2 1/2	46x2 1/2	N	18
19	Lon	P.Own	Own	3	No	M.M.5	Eat 1502	SF	H 5.66	22.6	Eat 430 F	BE4IM	346	TX	CAS	6 1/2 x 3 1/4 x 1 1/2	C	127 1/2	81	34	32x2 1/2	52x3	52x3	N	19
20	Lon	P.Own	Own	3	No	M.M.5	Eat 1502	SF	H 5.66	22.6	Eat 430 F	BE4IM	346	TX	CAS	6 1/2 x 3 1/4 x 1 1/2	C	104	61 1/2	34	32x2 1/2	52x3	52x3	N	20
21	Lon	P.Own	Own	3	No	M.M.5	Eat 1502	SF	H 5.66	22.6	Eat 430 F	BE4IM	346	TX	CAS	6 1/2 x 3 1/4 x 1 1/2	C	127 1/2	81	34	32x2 1/2	52x3	52x3	N	21
22	Lon	P.Own	Own	3	No	M.M.5	Eat 1502	SF	H 5.66	22.6	Eat 430 F	BE4IM	346	TX	CAS	6 1/2 x 3 1/4 x 1 1/2	C	104	61 1/2	34	32x2 1/2	52x3	52x3	N	22
23	Mod	P.Own	W-G T7	4	No	M.M.5	Own 800	SF	H 6.50	42.9	Own 200	B4IM	295	TX	Ros	6 1/2 x 2 1/4 x 1 1/2	C	98 1/2	55 1/2	32	40x2 1/2	52x2 1/2	52x2 1/2	N	23
24	Per	P.B-L	B-L	4	No	Spl	Cla B370	SF	H 5.4	34.6	Own F208	L4IH	220	TX	Ros	5 1/2 x 3 1/4 x 1 1/2	C	96	58	34	40x2 1/2	52x3	52x3	N	24
25	Fed	D.B-L	B-L 20	4	No	Spl	Tim 51000H	SF	H 4.8	5.9	Tim 11710H	L4IH	308	TX	Ros	5 1/2 x 3 1/4 x 1 1/2	C	101	Opt	32 1/2	38x2 1/2	52x2 1/2	52x2 1/2	N	25
26	G&O	P.B&B	WO-BB	4	No	Spl	Tim 52200 H	SF	R 5.83	35.9	Tim 11710H	L4IH	211	TX	Han	6x2 1/4 x 1 1/2	C	112	62 1/2	34	38x2 1/2	52 1/2 x 2 1/2	52 1/2 x 2 1/2	N	26
27	Mod	D.B-L	B-L 31	4	No	Spl	Tim 54000H	SF	R 5.83	38.0	Tim 12703H	L4IH	279	CD	Ros	5 1/2 x 2 1/4 x 1 1/2	C	84	56	33	38x2 1/2	50x3	50x3	N	27
28	Per	D.B-L	B-L 214	4	No	Spl	Tim 52200H	SF	H 5.83	37.4	Tim 11703H	L4IH	452	TX	Ros	6x3x1 1/2	C	Opt	Opt	34	38x2 1/2	54x2 1/2	54x2 1/2	N	28
29	Chl	D.B-L	B-L 214	4	No	Spl	Tim 54200H	SF	H 5.83	37.4	Tim 14703H	L4IH	380	TX	Ros	6 1/2 x 3 1/4 x 1 1/2	C	128	81	34	37 1/2 x 2 1/2	50x2 1/2	50x2 1/2	N	29
30	Per	D.B-L	B-L 214	4	No	Cle 3	Tim 54200H	SF	R 5.83	39.1	Tim 14703H	L4IH	415	TX	Ros	6 1/2 x 3 1/4 x 1 1/2	C	117 1/2	74 1/2	32	42x2 1/2	54x2 1/2	54x2 1/2	N	30
31	Per	D.B-L	B-L 214	4	No	Spl	Tim 54200H	SF	R 4.86	30.2	Tim 14703H	L4IH	415	TX	Ros	6 1/2 x 3 1/4 x 1 1/2	C	117 1/2	74 1/2	32	42x2 1/2	54x2 1/2	54x2 1/2	N	31
32	Own	D.Own	Own BC	4	No	Spl	Tim 52000H	SF	H 4.90	24.2	Own BC	O4IV	229	CD	Ros	6x2 1/4 x 1 1/2	C	108	72	34	40x2 1/2	50x3	50x3	N	32
33	Mod	D.B-L	B-L 214	4	No	Pet 2	Tim 52000H	SF	H 4.85	Opt	Tim 11703H	L4IH	229	CD	Ros	6x2 1/4 x 1 1/2	C	108	72	34	40x2 1/2	50x3	50x3	N	33
34	Lon	D.B-L	B-L 35	4	No	Blo	Own 30	2R	H 6.45	34.5	Tim 14704 H	L4IH	394	FX	Han	6x3x1 1/2	C	144	90	34	40x2 1/2	52x2 1/2	52x2 1/2	N	34
35	Lon	P.B-L	B-L 20	4	No	Blo	Own 20	2R	H 6.00	30.0	Col 5530	L4IH	297	FX	Han	6x2 1/4 x 1 1/2	C	133 1/2	83	34	36x2 1/2	48x2 1/2	48x2 1/2	N	35
36	Own	D.B-L	Own	4	No	Cle	Own 20	SF	H 5.2	34.3	Own	L4IH	289	TX	Ros	6 1/2 x 3 1/4 x 1 1/2	C	97 1/2	52 1/2	40 1/2	38x2 1/2	50x2 1/2	50x2 1/2	N	36
37	Own	D.B-L	Own	4	No	Cle	Own	SF	H 5.2	34.3	Own	L4IH	289	TX	Ros	6 1/2 x 3 1/4 x 1 1/2	C	111 1/2	67 1/2	40 1/2	38x2 1/2	50x2 1/2	50x2 1/2	N	37
38	Own	D.B-L	Own	4	No	Cle	Own	SF	H 5.2	34.3	Own	L4IH	289	TX	Ros	6 1/2 x 3 1/4 x 1 1/2	C	111 1/2	67 1/2	40 1/2	38x2 1/2	50x2 1/2	50x2 1/2	N	38
39	McC	P.B&B	B-L	4	No	Spl	Sal	SF	H 5.38	34.5	Sal	S4IM	275	TX	War	6x2 1/4 x 1 1/2	C	91 1/2	37 1/2	34	36x2 1/2	50x2 1/2	50x2 1/2	N	39
40	Own	P.B&B	Ful WO	4	No	Spl	Tim 52200A	SF	H 5.83	31.2	Tim 11703H	L4IH	452	TX	Ros	6x3x1 1/2	C	Opt	Opt	31 1/2	40x2 1/2	50x3	50x3	N	40
41	Own	D.B-L	B-L 35	4	No	Blo	Tim	SF	H 5.1	20.8	Tim	L4IH	220	TX	Ros	5 1/2 x 3 1/4 x 1 1/2	C	110	66	34	41x2 1/2	50x2 1/2	50x2 1/2	N	41
42	Lon	D.B-L	B-L 35	4	No	Blo	Tim 63702	WF	U 6.5	34.8	Tim 14704 H	L4IH	394	FX	Han	6x3x1 1/2	C	144	90	34	40x2 1/2	50x3	50x3	N	42
43	Lon	P.B-L	B-L 20	4	No	Blo	Tim 54000	SF	H 5.83	38.0	Tim 11703H	L4IH	219	TX	Han	6x2 1/4 x 1 1/2	C	104	60	34	38x2 1/2	50x2 1/2	50x2 1/2	N	43
44	Lon	D.B-L	B-L 20	4	No	Spl	Tim 52000 H	SF	H 5.6	35.8	Cla	B4IM	275	TX	Ros	7 1/2 x 2 1/4 x 1 1/2	C	77 1/2	40 1/2	32	38 1/2 x 2 1/2	50x2 1/2	50x2 1/2	N	44
45	Fed	P.B&B	War	4	No	Spl	Cla	SF	H 5.6	35.8	Cla	B4IM	275	TX	Ros	7 1/2 x 2 1/4 x 1 1/2	C	77 1/2	40 1/2	32	38 1/2 x 2 1/2	50x2 1/2	50x2 1/2	N	45
46	Fed	P.B&B	War	4	No	Spl	Cla	SF	H 5.6	35.8	Cla	B4IM	275	TX	Ros	7 1/2 x 2 1/4 x 1 1/2	C	77 1/2	40 1/2	32	38 1/2 x 2 1/2	50x2 1/2	50x2 1/2	N	46
47	Own	P.B&B	WGASI-T9	4	No	Spl	Cla	SF	H 5.6	35.8	Cla	B4IM	275	TX	Ros	7 1/2 x 2 1/4 x 1 1/2	C	194 1/2	48 1/2	32	38 1/2 x 2 1/2	50x2 1/2	50x2 1/2	N	47
48	McC	Lon	WGASI-T9	4	No	Spl	Tim 53600	SF	H 5.66	35.8	Tim 30010-A1	B4IM	224	TX	Ros	6x2 1/4 x 1 1/2	C	85 1/2	50 1/2	34	36x1 1/2	48x2 1/2	48x2 1/2	N	48
49	Own	P.Own	Own 5B	4	No	Spl	Own 7CB	SF	H 5.6	35.8	Own 7CB	L4IH	211	TX	Han	6 1/2 x 3 1/4 x 1 1/2	C	115 1/2	68 1/2	34 1/2	41x2	54x3	54x3	N	49
50	Own	D.B-L	B-L 35	4	No	Spl	Own 30R	WF	H 6.37	42.3	Own	B4IM	320	RI	Ros	6x2 1/4 x 1 1/2	C	120 1/2	78 1/2	30	40x2 1/2	50x3	50x3	N	50
51	Fed	P.Roc	Cov	4	No	M.M.4	Cla	SF	H 6.37	42.3	Own	B4IM	232	41	Own	6x2 1/4 x 1 1/2	C	86 1/2	51 1/2	37	36x1 1/2	45x2 1/2	45x2 1/2	N	51
52	Fed	P.B&B	War	4	No	Spl	Cla	SF	H 6.37	42.3	Own	B4IM	232	41	Own	6x2 1/4 x 1 1/2	C	86 1/2	51 1/2	37	36x1 1/2	45x2 1/2	45x2 1/2	N	52
53	Per	D.B-L	B-L 20	4	No	Spl	Tim 54000H	SF	H 6.8	36.3	Tim 14703	L4IH	415	TX	Ros	6x2 1/4 x 1 1/2	C	86 1/2	51 1/2						



Line Number	Make, Model and Capacity	Chassis Price	General		Tire Size		Make and Model	Engine										Fuel System		Electrical System		Line Number					
			Standard W.B.	Max. W.B. Furnished	Gross Vehicle Wt. (See Key Note)	Chassis Wt. (Stripped)		Front	Rear	Number of Cylinders Bore and Stroke	Piston Displacement	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Valve Arrangement	Camshaft Drive	Piston Material	Dia. Main Bearings	Length Main Bearings	No. Main Bearings	Oiling System	Governor Make		Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	
2 Ton—Cont'd																											
1	Indiana... 111XW	120	120	12500	3730	P 32x6	DP32x6	Her	4-4x5	251.3	55.6	26-2000	L	G	C	2	9 1/4	3	CC	No	Str	G	Eis	Non	1		
2	International... SD-44	117	117	11717	3700	P 30x5	P 32x6	Lye CT	4-3 1/2 x 5	221.5	52.5	43-2350	L	G	C	2	9 1/4	3	CC	No	Str	G	A-Bo	Non	2		
3	International... SD-46	117	117	11717	3750	P 30x5	P 32x6	Lye 4SL	6-3 1/2 x 4 1/2	224	55.3	61-2800	L	G	C	2	9 1/4	3	CC	No	Str	G	A-Bo	Non	3		
4	International... A-4	145	145	14515	5070	P 32x6	DP32x6	Own FBB	6-3 1/2 x 4 1/2	279	31.5	67-2600	H	C	C	2	13 1/8	7	PC	No	Ha	Zen	D-R	Mod	4		
5	International... SF-46	140	140	14016	3955	P 32x6	P 34x7	Lye 4SL	6-3 1/2 x 4 1/2	224	55.3	61-2800	L	G	C	2	9 1/4	3	CC	No	Ha	Zen	D-R	Mod	5		
6	Kenworth... 101	1995	164	182	10000	4200	P 30x5	Bud H260	6-3 1/2 x 4 1/2	259	9.2	75-3000	L	G	C	2	9 1/4	3	CC	No	Str	G	D-R	Mod	6		
7	Kleiber... 52	1500	152	158	3000	P 32x6	P 32x6	Con	6-3 1/2 x 4 1/2	214.7	27.3	61-3000	L	G	C	2	9 1/4	3	CC	No	Str	G	D-R	Mod	7		
8	LaFra-Republic... D-1	144	175	9000	3750	P 30x5	DP30x5	Lye 4SL	6-3 1/2 x 4 1/2	224	55.3	61-2750	L	G	C	2	9 1/4	3	CC	No	Str	G	A-L	A-L	8		
9	Lange... L	13450	144	210	15000	5800	P 32x6	DP32x6	Her WXC	6-4 1/2 x 5	339	38.4	74-2400	L	G	C	2	13 1/8	7	PC	No	Pe	Str	V	A-L	A-L	9
10	Larabee... 35	2575	152	179	11425	5000	B 7.00/20	Con 16C	6-3 1/2 x 4 1/2	248	27.3	65-2700	L	G	C	2	10 1/4	7	FP	No	Zen	G	D-R	A-L	10		
11	LeMoon... HB21	2400	163	190	12000	4900	P 32x6	Wau 6MS	6-3 1/2 x 4 1/2	315	33.7	72-2500	L	G	C	2	13 1/8	7	PC	No	Str	G	A-L	A-L	11		
12	Maccar... 40A	2400	155	183	12400	6550	P 32x6	Bud H298	6-3 1/2 x 4 1/2	298	33.7	83-2500	L	G	C	2	9 1/4	3	CC	No	Str	G	D-R	A-L	12		
13	Moreland... RR-7	2025	145	9300	4000	P 32x6	P 32x6	Con 16C	6-3 1/2 x 4 1/2	248	27.3	70-1300	L	G	C	2	10 1/4	7	FP	No	Zen	M	A-L	A-L	13		
14	Netco... B	155	183	9500	5000	B 7.00/20	B 7.00/20	Wau 6TL	6-3 1/2 x 4 1/2	255	37.7	68-2600	L	G	C	2	13 1/8	7	PC	No	Ha	Zen	M	A-L	A-L	14	
15	Noble... 146	2885	175	194	11850	4850	P 32x6	DP32x6	Her WXC	6-3 1/2 x 4 1/2	241	27.3	57-2500	L	G	C	2	10 1/4	7	FP	No	Bu	Str	V	A-L	A-L	15
16	Omort... 200	200	124	148	11500	4800	P 32x6	Bud H86	6-3 1/2 x 4 1/2	251	32.5	46-2000	L	G	C	2	9 1/4	3	CC	No	Str	G	D-R	A-L	16		
17	Pierce-Arrow... PT	1545	142	161	12000	4165	P 32x6	DP32x6	6-3 1/2 x 4 1/2	298	33.7	70-2800	L	G	C	2	13 1/8	7	PC	No	Str	G	D-R	A-L	17		
18	Relay... S11	2030	162	185	5500	P 36x8	DP36x8	Bud D86	6-3 1/2 x 5	309	63.1	56-2100	L	G	C	2	7 1/2	4	PC	No	Zen	V	A-L	A-L	18		
19	Relay... S11	2030	162	185	4700	P 32x6	DP32x6	Bud H86	6-3 1/2 x 4 1/2	241	27.3	56-2100	L	G	C	2	7 1/2	4	PC	No	Zen	V	A-L	A-L	19		
20	Relay... S11	2030	161	185	6800	P 36x8	DP36x8	Bud DW6	6-3 1/2 x 5	331	63.7	64-2100	L	G	C	2	9 1/4	3	CC	No	Zen	V	A-L	A-L	20		
21	Reo... FC	1645	152	179	13600	4025	P 32x6	DP32x6	6-3 1/2 x 4 1/2	268	32.5	70-2800	L	G	C	2	13 1/8	7	PC	No	Sch	V	D-R	A-L	21		
22	Reo... FD	1745	158	185	13600	4075	P 32x6	DP32x6	6-3 1/2 x 4 1/2	268	32.5	70-2800	L	G	C	2	13 1/8	7	PC	No	Sch	V	D-R	A-L	22		
23	Reo... FH	1545	142	174	13600	4165	P 32x6	DP32x6	6-3 1/2 x 4 1/2	268	32.5	70-2800	L	G	C	2	13 1/8	7	PC	No	Sch	V	D-R	A-L	23		
24	Schacht De Luxe... 20	160	174	5300	B 7.50/20	DB 7.50/20	Con 16C	Lye 4SL	6-3 1/2 x 4 1/2	248	27.3	65-2600	L	G	C	2	10 1/4	7	FP	No	Zen	M	D-R	A-L	24		
25	Service... 40	3240	168	185	4900	P 36x8	DP36x8	Bud D86	6-3 1/2 x 5	309	63.1	56-2000	L	G	C	2	7 1/2	4	PC	No	Zen	V	A-L	A-L	25		
26	Service... S11	2030	162	185	4500	P 32x6	DP32x6	Bud H86	6-3 1/2 x 4 1/2	241	27.3	52-2200	L	G	C	2	9 1/4	3	CC	No	Zen	V	A-L	A-L	26		
27	Sterling... DB9-4	139	168	9000	3625	P 34x7	P 34x7	Con 16C	6-3 1/2 x 4 1/2	248	27.3	63-2500	L	G	C	2	10 1/4	7	FP	No	Zen	V	D-R	A-L	27		
28	Stewart... 28X	1495	136	176	10000	4058	B 6.50/20	Lye 4SL	6-3 1/2 x 4 1/2	248	27.3	63-2500	L	G	C	2	10 1/4	7	FP	No	Zen	V	D-R	A-L	28		
29	Stewart... 29X	1695	145	176	10000	4960	P 32x6	DP32x6	Lye 4SL	6-3 1/2 x 4 1/2	278	31.5	85-3100	L	G	C	2	9 1/4	3	CC	No	Str	G	D-R	A-L	29	
30	Studebaker... S-50	895	148	160	9560	3810	B 6.50/20	DB 6.50/20	6-3 1/2 x 4 1/2	205	25.4	70-3200	L	G	C	2	9 1/4	3	CC	No	Str	G	D-R	A-L	30		
31	White... 56	3125	165	175	13500	5275	S 36x4	S 36x7	4-4 1/2 x 5	289	25.6	45-1600	L	G	C	2	11 1/4	7	FP	Own	Str	V	L-N	L-N	31		
32	White... 61	2550	138	157	11500	4980	B 7.00/20	B 7.00/20	6-3 1/2 x 4 1/2	299	33.7	61-2100	L	G	C	2	10 1/4	7	FP	Own	Str	V	L-N	L-N	32		
33	White 160-161 1 to 2T	138	157	10000	3005	P 30x5	Own GRCB	4-4 1/2 x 5	289	25.6	45-1800	L	G	C	2	11 1/4	7	FP	Own	Str	V	L-N	L-N	33			
34	White 162 1 to 2T	138	157	10000	3005	P 30x5	Own GRCB	4-4 1/2 x 5	289	25.6	45-1800	L	G	C	2	11 1/4	7	FP	Own	Str	V	L-N	L-N	34			
35	Witt-Will... C2B	2450	158	175	12500	5400	P 32x6	DP32x6	6-3 1/2 x 4 1/2	248	27.3	66-3200	L	G	C	2	10 1/4	7	PC	No	Zen	M	D-R	A-L	35		
36	Witt-Will... C2W	2550	158	175	12500	5400	P 32x6	DP32x6	6-3 1/2 x 4 1/2	248	27.3	66-3200	L	G	C	2	10 1/4	7	PC	No	Zen	M	D-R	A-L	36		
37	Witt-Will... R2B	158	175	12500	5820	P 32x6	DP32x6	Con 16R	6-4 1/2 x 5	311	38.4	72-2400	H	C	C	2	11 1/4	7	FP	No	Zen	M	D-R	A-L	37		
38	Witt-Will... R2	158	175	12500	5800	P 32x6	DP32x6	Con 16R	6-4 1/2 x 5	311	38.4	72-2400	H	C	C	2	11 1/4	7	FP	No	Zen	M	D-R	A-L	38		
39	World... DC-60	1845	150	164	12000	4450	B 7.00/20	Lye 4SL	6-3 1/2 x 4 1/2	268	28.8	96-3400	L	G	C	2	9 1/4	3	CC	No	Ha	Zen	M	A-L	A-L	39	
40	World... DA-88	2300	151	167	12000	4720	B 7.50/20	Lye 4SL	6-3 1/2 x 4 1/2	268	28.8	96-3400	L	G	C	2	9 1/4	3	CC	No	Ha	Zen	M	A-L	A-L	40	
2 1/2 Ton																											
41	Acme... 56 Spec	3577	178	Op	13850	7050	P 34x7	DP34x7	6-4 1/2 x 5	339	38.4	82-2400	H	C	C	2	14 1/4	7	FP	Co	Str	V	A-L	A-L	41		
42	Acme... 52	3770	186	Op	14550	7150	P 34x7	DP34x7	6-4 1/2 x 5	339	38.4	82-2400	H	C	C	2	14 1/4	7	FP	Co	Str	V	A-L	A-L	42		
43	Amer. LAF... Chief	3900	180	Op	14000	6200	P 34x7	DP34x7	6-3 1/2 x 4 1/2	331	33.7	65-2100	L	G	C	2	9 1/4	3	CC	No	Ha	Zen	V	D-R	A-L	43	
44	Atterbury... 50	50	189	202	14000	5800	B 8.25/20	Lye ASD	6-3 1/2 x 4 1/2	298	33.7	85-2800	L	G	C	2	13 1/8	7	PC	Co	Str	V	A-L	A-L	44		
45	Autocor... D	3500	150	Op	15000	5300	P 34x7	DP34x7	6-4 1/2 x 5	358	38.4	82-2400	L	G	C	2	13 1/8	7	FP	Pe	Str	V	D-R	A-L	45		
46	Available... T-20	Op Op	14000	5600	P 32x6	DP32x6	Wau MS	6-3 1/2 x 4 1/2	298	33.7	67-2300	L	G	C	2	12 1/4	7	FP	Wa	Sch	V	D-R	A-L	46			
47	Available... T-27	Op Op	14000	5900	P 32x6	DP32x6	Wau MS	6-3 1/2 x 4																			

*April, 1931*



Line Number	Make, Model and Capacity	General				Tire Size		Engine																Fuel System	Electrical System		Line Number
		Chassis Price	Standard W.B.	Max. W.B. Furnished	Gross Vehicle Wt. (See Key Note)	Chassis Wt. (Stripped)	Front	Rear	Make and Model	Number of Cylinders Bore and Stroke	Piston Displacement	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Valve Arrangement	Camshaft Drive	Piston Material	Dia. Main Bearings	Length Main Bearings	No. Main Bearings	Oiling System	Governor Make	Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make		
2½ Ton—Cont'd																											
1	White, 210-1	3750	170	190	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	326.3	28.9	54-1600	L	G	S	2½	11½	3	FP	On	Zen	V	Els	.....	1	
2	White, 210-1	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	2	
3	White, 212, 1½-2½ T	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	3	
4	White, 212, 1½-2½ T	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	4	
5	White, 212, 1½-2½ T	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	5	
6	White, 212, 1½-2½ T	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	6	
7	White, 212, 1½-2½ T	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	7	
8	White, 212, 1½-2½ T	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	8	
9	White, 212, 1½-2½ T	148	196	196	17000	6438	S 36x5	S 36x8	Own GRB	4-4½x5½	289	25.6	45-1800	L	G	S	2½	11½	3	FP	Own	Zen	V	D-R	D-R	9	
10	World	2595	164	178	13500	5040	B 8.25/20	DB8.25/20	Lyc GU	6-3½x4½	268	28.8	96-3400	L	G	C	2½	11½	8	CC	FP	Ha	M	A-L	A-L	10	
3 Ton																											
11	Acme	62	4230	186	Op	15850	7450	P 36x8	DP36x8	Con 20R	6-4½x4½	380.9	40.8	89-2400	H	C	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	11
12	Acme	62	4230	186	Op	15850	7450	P 36x8	DP36x8	Con 20R	6-4½x4½	380.9	40.8	89-2400	H	C	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	12
13	Armleder	31	Op	19	Op	12850	5500	P 32x6	DP32x6	Her WXB	6-3½x4½	298.0	33.7	66-2200	L	C	C	2½	12½	7	FP	Co	Str	V	A-L	A-L	13
14	Atterbury	31	Op	19	Op	12850	5500	P 32x6	DP32x6	Her WXB	6-3½x4½	298.0	33.7	66-2200	L	C	C	2½	12½	7	FP	Co	Str	V	A-L	A-L	14
15	Atterbury	31	Op	19	Op	12850	5500	P 32x6	DP32x6	Her WXB	6-3½x4½	298.0	33.7	66-2200	L	C	C	2½	12½	7	FP	Co	Str	V	A-L	A-L	15
16	Atterbury	31	Op	19	Op	12850	5500	P 32x6	DP32x6	Her WXB	6-3½x4½	298.0	33.7	66-2200	L	C	C	2½	12½	7	FP	Co	Str	V	A-L	A-L	16
17	Autocar	65	190	215	16000	6000	B 9.00/20	DP9.00/20	Lyc ASD	6-3½x4½	328.3	33.7	85-2800	L	C	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	17	
18	Autocar	65	190	215	16000	6000	B 9.00/20	DP9.00/20	Lyc ASD	6-3½x4½	328.3	33.7	85-2800	L	C	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	18	
19	Autocar 2½-3T	SH	4300	114	161	19000	6770	P 34x7	DP34x7	Own	6-4½x4½	404.0	43.4	92-2400	L	G	C	2½	14½	7	FP	Pe	Str	V	A-L	A-L	19
20	Autocar 2½-3T	SH	4300	114	161	19000	6770	P 34x7	DP34x7	Own	6-4½x4½	404.0	43.4	92-2400	L	G	C	2½	14½	7	FP	Pe	Str	V	A-L	A-L	20
21	Available	T-39	Op	Op	Op	19000	7800	P 36x8	DP36x8	Wau SRL	6-4½x5½	462.0	45.9	88-2200	L	G	C	2½	13½	7	FP	Pe	Str	V	A-L	A-L	21
22	Available	T-43	Op	Op	Op	19000	7800	P 36x8	DP36x8	Wau SRL	6-4½x5½	462.0	45.9	88-2200	L	G	C	2½	13½	7	FP	Pe	Str	V	A-L	A-L	22
23	Brookway	170	170	224	17500	7200	P 34x7	DP34x7	Con	6-4½x4½	427.5	45.9	100-2400	H	C	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	23	
24	Brookway	170	170	224	17500	7200	P 34x7	DP34x7	Con	6-4½x4½	427.5	45.9	100-2400	H	C	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	24	
25	Chicago	1-30-A	160	208	15740	6740	B 9.00/20	DP9.00/20	Wau 6ML	6-4½x4½	358.3	36.2	77-2200	L	G	C	2½	12½	7	FP	Co	Str	V	A-L	A-L	25	
26	Clinton	65	184	Op	Op	14500	5925	P 34x5	DS34x5	Bud ETU	4-4½x5½	312.0	28.9	49-1900	L	G	C	2½	10½	3	PC	Co	Str	V	A-L	A-L	26
27	Coleman	D40	150	250	16600	5500	P 40x8	P 40x8	Bud DW 6	6-3½x5	330.9	33.7	72-2600	L	G	C	2½	9½	4	PC	No	Str	V	A-L	A-L	27	
28	Commer	60	4680	176	192	17100	6700	P 36x8	DP36x8	Bud BA-6	6-4½x5½	410.0	40.8	83-2100	L	G	C	2½	9½	4	PC	No	Str	V	A-L	A-L	28
29	Concord	JX-6	4200	154	174	17200	6700	P 34x7	DP34x7	Bud DW 6	6-3½x5	330.9	33.7	73-2100	L	G	C	2½	9½	4	PC	No	Str	V	A-L	A-L	29
30	Concor	CE	160	224	20000	5950	B 8.25/20	DB8.25/20	Lyc TS	6-3½x5	353.8	36.2	98-2700	L	G	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	30	
31	Concor	CEB	190	190	17000	7200	B 7.50/20	DB7.50/20	Con 20-R	6-4½x4½	380.9	40.8	90-2200	H	C	C	2½	13½	7	FP	Co	Str	V	A-L	A-L	31	
32	Corbitt 3-4 T	18W6	178	30	19000	6780	P 36x8	DP36x8	Con 18R	6-4½x4½	340.0	38.4	82-2400	L	C	C	2½	12½	7	FP	No	Zen	V	D-R	D-R	32	
33	Day-Elder	160	3695	160	204	16000	6600	B 7.50/20	DB9.00/20	Con 18R	6-4½x4½	339.3	38.4	82-2400	H	C	C	2½	13½	7	FP	Co	Zen	M	D-R	D-R	33
34	Diamond T	603	3300	169	230	20000	7500	B 9.00/20	DB9.00/20	Her YXC	6-4½x4½	428.4	45.9	94-2200	L	G	C	2½	15	7	FP	Co	Zen	M	A-L	A-L	34
35	Diamond T	606	3440	177	244	19000	7300	B 9.00/20	DB9.00/20	Her YXC2	6-4½x4½	453.8	48.6	98-2200	L	G	C	2½	15	7	FP	Co	Zen	M	A-L	A-L	35
36	Dodge Bros.	1960	135	135	12250	4355	P 34x7	DP34x7	Own	6-3½x4½	241.0	27.3	78-3000	L	C	C	2½	11	7	FP	Co	Str	V	A-L	A-L	36	
37	Dodge Bros.	2010	165	165	12220	4640	P 34x7	DP34x7	Own	6-3½x4½	241.0	27.3	78-3000	L	C	C	2½	11	7	FP	Co	Str	V	A-L	A-L	37	
38	Dodge Bros.	2060	165	165	12715	4835	P 34x7	DP34x7	Own	6-3½x4½	241.0	27.3	78-3000	L	C	C	2½	11	7	FP	Co	Str	V	A-L	A-L	38	
39	Dodge Bros.	P-60	2645	146	184	18979	5543	P 32x6	DP32x6	Own	6-3½x5	309.6	31.5	96-3000	L	G	A	2½	11½	7	FP	Co	Zen	M	D-R	D-R	39
40	Dodge Bros.	P-61	2575	170	170	19429	5789	P 32x6	DP32x6	Own	6-3½x5	309.6	31.5	96-3000	L	G	A	2½	11½	7	FP	Co	Zen	M	D-R	D-R	40
41	Dodge Bros.	P-62	2675	195	195	19879	5901	P 32x6	DP32x6	Own	6-3½x5	309.6	31.5	96-3000	L	G	A	2½	11½	7	FP	Co	Zen	M	D-R	D-R	41
42	Dodge Bros.	P-63	2675	195	195	19879	5901	P 32x6	DP32x6	Own	6-3½x5	309.6	31.5	96-3000	L	G	A	2½	11½	7	FP	Co	Zen	M	D-R	D-R	42
43	Douglas	D4	4010	186	Op	20000	6500	S 36x8	S 36x10	Bud YBU-I	4-4½x6	381.0	32.4	50-1400	L	G	C	2½	9½	3	PC	Co	Str	V	A-L		

Line Number	Radiator Make	Clutch	Gear Set		Universal Make and No.	Rear Axle			Front Axle			Brakes		Frame		Body Mounting Data		Springs		Auxiliary Type	Line Number					
			Type and Make	Make and Model		Location	No. of Forward Speeds	Aux. Locat. and Speeds	Make and Model	Final Drive and Type	Drive and Torque	Gear Ratios	Make and Model	Service	Area Service Brakes	Hand	Steering Gear Make	Dim. Side Rail	Type			Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	Front	Rear
2 1/2 Ton—Cont'd																										
1	Ow	P.Own	Ow	GRBA	U	4	No	Spl 3	Ow 51A	S 1/2	R 7.14	35.6	Ow 51A	O2IM	335	FX	Ow	8x3x 1/4	C 178%	84% 34	40 1/2 x 2 1/2	54 1/2 x 3	N	1		
2	.....	P.Own	Ow	8B	U	4	No	Spl 3	Ow 7C	S 1/2	H 5.67	23.4	Ow 7D	L4IH	211	TX	Han	6 1/2 x 3 1/2 x 1/4	C 115%	68%	34%	41x2 1/2	54x3	2		
3	.....	P.Own	Ow	8B	U	4	No	Spl 3	Ow 7C	S 1/2	H 5.67	23.4	Ow 7D	L4IH	211	TX	Han	6 1/2 x 3 1/2 x 1/4	C 115%	68%	34%	41x2 1/2	54x3	3		
4	.....	P.Own	Ow	5B	U	4	No	Spl 3	Ow 7C	S 1/2	H 5.67	23.4	Ow 7D	L4IH	349	FX	Han	6 1/2 x 3 1/2 x 1/4	C 115%	68%	34%	41x2 1/2	54x3	4		
5	.....	P.Own	Ow	4B	U	4	No	Spl 4	Ow 14C	SF	R 6.38	41.8	Ow 110	O2IMV	349	CI	Ros	7 1/2 x 2 1/2 x 1/4	C 107%	67%	34	41x2 1/2	54x3	5		
6	You	D.B-L	B-L	51	U	5	No	Spl 3	Ow 30R	WF	H 4.8	38.7	Shu 5550	O2IMV	320	RI	Ros	7 1/2 x 2 1/2 x 1/4	C 141%	83%	30	40x2 1/2	54x3	6		
7	Per	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	WF	H 5.3	28.3	Tim 14703H	L4IHV	578	TX	Ros	6 1/2 x 2 1/2 x 1/4	C 135%	76	32	41x2 1/2	54x3	7		
8	Per	D.B-L	B-L	51	U	4	No	Spl 3	Tim 5620H	WF	R 7.0	32.1	Tim 14703H	L4IHV	578	TX	Ros	6 1/2 x 2 1/2 x 1/4	C 135%	76	32	41x2 1/2	54x3	8		
9	Mod	dp.Lon	Ful	MLU	U	4	No	Blo 3	Tim 5620H	SF	R 7.75	48.1	Shu 5432	L4IHV	578	TD	Ros	7x3x 1/4	C 135%	76	32	38x2 1/2	54x2 1/2	9		
3 Ton																										
10	Per	D.B-L	B-L	60-4	A	4	No	Blo	Tim 56706DH	WF	R 7.75	48.1	Tim 15733H	L4IH	766	2RI	Ros	7x3x 1/4	C 156	96%	34	40x2 1/2	54x3	10		
11	Per	D.B-L	B-L	51-5	U	4	No	Blo	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	766	2RI	Ros	6 1/2 x 2 1/2 x 1/4	C 156	130%	34	40x2 1/2	54x3	11		
12	Ow	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	766	2RI	Ros	6 1/2 x 2 1/2 x 1/4	C 156	130%	34	40x2 1/2	54x3	12		
13	You	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IHV	275	TD	Ros	7x3x 1/4	C 148%	90%	34	41x2 1/2	54x3 1/2	13		
14	Per	D.B-L	B-L	35	U	4	No	Spl 400	Tim 5620H	WF	H 7.1	37.4	Tim 14703H	L4IHV	657	....	Ros	7x3x 1/4	C 173%	106	34	39x2 1/2	56x3	14		
15	Per	D.B-L	B-L	551	U	4	No	Spl 500	Tim 5620H	2F	R 7.50	40.1	Tim 35000H	L4IH	657	....	Ros	8x3x 1/4	C 197%	119	34	40x3	56x3	15		
16	Ow	dp.Lon	Ow	W 4C	U	4	No	Spl	Ow	H	W 7.67	40.6	Ow	O2IM	328	2I	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	16		
17	Ow	dp.Lon	Ow	W 4C	U	4	No	Spl	Ow	H	W 7.67	40.6	Ow	O2IM	328	2I	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	17		
18	Ow	dp.Lon	Ow	W 4C	U	4	No	Spl	Ow	H	W 7.67	40.6	Ow	O2IM	328	2I	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	18		
19	You	D.B-L	B-L	51	U	5	No	Blo	Tim 56720	WF	R 8.5	50.5	Shu 5572	L4IH	....	FD	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	19		
20	You	D.B-L	B-L	60	U	7	No	Spl 3	Tim 56720	WF	R 8.5	50.7	Shu 5572	L4IH	....	FD	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	20		
21	G&O	D.B-L	B-L	35	U	4	No	Spl 3	Wis	2F	R 6.41	46.6	Shu	L4IH	380	CD	Ros	8x3x 1/4	C 142%	84	34	40x2 1/2	54x3	21		
22	G&O	D.B-L	B-L	35	U	4	No	Spl 3	Wis	2F	R 6.41	46.6	Shu	L4IH	380	CD	Ros	8x3x 1/4	C 142%	84	34	40x2 1/2	54x3	22		
23	Lon	P.B&B	B-L	51	U	4	No	Spl 2	Tim 56706DH	WF	R 7.75	48.1	Shu 5550	T2IMV	500	CD	Ros	7x3x 1/4	C 132%	83	34	40x2 1/2	53x3	23		
24	Chl	D.B-L	B-L	51	U	4	No	Spl 4	Tim 5620H	WF	H 7.13	46.3	Tim 33020H	L4IH	651	TD	Han	7x3x 1/4	C 132%	83	34	40x2 1/2	53x3	24		
25	Per	D.B-L	B-L	55	U	4	No	Spl 4	Tim 5620H	WF	H 7.13	46.3	Tim 33020H	L4IH	651	TD	Han	7x3x 1/4	C 132%	83	34	40x2 1/2	53x3	25		
26	Per	D.B-L	B-L	55	U	4	No	Spl 4	Tim 5620H	WF	H 7.13	46.3	Tim 33020H	L4IH	651	TD	Han	7x3x 1/4	C 132%	83	34	40x2 1/2	53x3	26		
27	Lon	D.B-L	B-L	551	U	4	No	Spl 500	Tim 5620H	WF	R 7.50	40.1	Tim 35000H	L4IH	657	....	Ros	8x3x 1/4	C 197%	119	34	40x3	56x3	27		
28	Ow	dp.Lon	Ow	W 4C	U	4	No	Spl	Ow	H	W 7.67	40.6	Ow	O2IM	328	2I	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	28		
29	Per	D.B-L	B-L	51	U	5	No	Blo	Tim 56720	WF	R 8.5	50.5	Shu 5572	L4IH	....	FD	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	29		
30	Per	D.B-L	B-L	60	U	7	No	Spl 3	Tim 56720	WF	R 8.5	50.7	Shu 5572	L4IH	....	FD	Ros	7x2 1/2 x 1/4	C 135%	76	34	41x2 1/2	53x3	30		
31	G&O	D.B-L	B-L	35	U	4	No	Spl 3	Wis	2F	R 6.41	46.6	Shu	L4IH	380	CD	Ros	8x3x 1/4	C 142%	84	34	40x2 1/2	54x3	31		
32	G&O	D.B-L	B-L	35	U	4	No	Spl 3	Wis	2F	R 6.41	46.6	Shu	L4IH	380	CD	Ros	8x3x 1/4	C 142%	84	34	40x2 1/2	54x3	32		
33	Fed	P.B&B	Ow	.....	U	4	No	U-P	Ow	S 1/2	H 7.13	46.3	Ow	L4IH	382	TX	Han	7 1/2 x 2 1/2 x 1/4	C 132%	84%	34	39x2 1/2	56x3	33		
34	Fed	P.B&B	Ow	.....	U	4	No	U-P	Ow	S 1/2	H 7.13	46.3	Ow	L4IH	382	TX	Han	7 1/2 x 2 1/2 x 1/4	C 132%	84%	34	39x2 1/2	56x3	34		
35	Fed	P.B&B	Ow	.....	U	4	No	U-P	Ow	S 1/2	H 7.13	46.3	Ow	L4IH	382	TX	Han	7 1/2 x 2 1/2 x 1/4	C 132%	84%	34	39x2 1/2	56x3	35		
36	Lon	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	36		
37	Lon	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	37		
38	Lon	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	38		
39	Lon	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	39		
40	Lon	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	40		
41	Lon	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	41		
42	Ow	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	42		
43	Ow	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	43		
44	Ow	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	44		
45	Mod	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	45		
46	Mod	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	46		
47	Per	D.B-L	B-L	35	U	4	No	Spl 3	Tim 5600H	2F	H 6.3	37.5	Shu 55723	L4IH	768	2RI	Ros	7 1/2 x 2 1/2 x 1/4	C 156	96%	34	40x2 1/2	54x3	47		
48	Per	D.B-L	B																							



Line Number	Make, Model and Capacity	General				Tire Size		Make and Model	Engine										Fuel System		Electrical System		Line Number		
		Chassis Price	Standard W.B.	Max. W.B. Furnished	Gross Vehicle Wt. (See Key Note)	Front	Rear		Number of Cylinders Bore and Stroke	Piston Displacement	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Valve Arrangement	Camshaft Drive	Piston Material	Dia. Main Bearings	Length Main Bearings	No. Main Bearings	Oiling System	Governor Make	Carburetor Make	Fuel Feed		Ignition System Make	Generator, Starter Make
3 Ton—Cont'd																									
1	Reo.....GCS	2375	210	210	17000	5320	P 32x6	DP32x6	Own	6-3 1/2 x 5 1/2	268.3	27.3	70-2800	L	GCC	2 1/2	12 1/2	7	PC	No	Sch	V	D-R	D-R	1
2	Schacht DeLuxe.....25	1680	175	192	.....	6400	B 8.25/20	DB8.25/20	Her WXB	6-3 1/2 x 5 1/2	298.0	33.7	66-2200	L	GCC	2 1/2	12 1/2	7	PC	No	Mo	V	D-R	D-R	2
3	Service.....60	2590	175	192	.....	7100	P 36x6	DP36x7	Bud BA-6	6-4 1/2 x 5 1/2	410.9	40.8	83-2100	L	GCC	2 1/2	12 1/2	7	PC	No	Bu	V	D-R	D-R	3
4	Stewart.....35X	2590	175	192	.....	5880	B 8.25/20	DB8.25/20	Lyc ASD	6-3 1/2 x 5 1/2	299.0	33.8	85-2400	L	GCC	2 1/2	12 1/2	7	PC	No	Bu	V	D-R	D-R	4
5	Stewart.....36X	2990	165	220	.....	6500	B 8.25/20	DB8.25/20	Lyc TS	6-3 1/2 x 5 1/2	354.0	36.2	90-2750	L	GCC	2 1/2	12 1/2	7	PC	No	Bu	V	D-R	D-R	5
6	Ward La France.....25R	193	205	13000	.....	6000	B 7.50/20	DB7.50/20	Wau GML	6-4 1/2 x 5 1/2	358	38.4	77-2200	L	GCC	2 1/2	12 1/2	7	PC	No	Ha	V	D-R	D-R	6
7	Ward La France.....25B	194	206	13000	.....	6000	B 7.50/20	DB7.50/20	Own	6-3 1/2 x 5 1/2	322	36.4	100-2400	L	GCC	2 1/2	12 1/2	7	PC	No	Ha	V	D-R	D-R	7
8	White.....58	4400	180	195	22000	7797	S 36x5	DS36x5	Own GRB	4-4 1/2 x 5 1/2	326.3	32.8	54-1600	L	GCC	2 1/2	10 1/2	3	FP	On	On	V	El	D-R	8
9	White.....621	4650	157	206	18000	7700	B 9.00/20	DB9.00/20	Own 3A	6-4 1/2 x 5 1/2	396	38.4	102-1800	H	GCC	2 1/2	13 1/2	7	FP	On	On	V	El	D-R	9
10	White.....630	5000	168	215	20000	8500	B 9.00/20	DB9.00/20	Own 3A	6-4 1/2 x 5 1/2	396	38.4	72-1800	H	GCC	2 1/2	13 1/2	7	FP	On	On	V	El	D-R	10
11	Witt-Will.....R3B	3400	159	.....	15500	6500	P 34x7	DP34x7	Con 18R	6-4 1/2 x 5 1/2	339	33.8	82-2400	H	GCC	2 1/2	13 1/2	7	FP	No	On	V	El	D-R	11
12	Witt-Will.....R3	3400	159	.....	15500	6500	P 34x7	DP34x7	Con 18R	6-4 1/2 x 5 1/2	339	33.8	82-2400	H	GCC	2 1/2	13 1/2	7	FP	No	On	V	El	D-R	12
13	World.....DC-88	3295	164	182	15000	5400	P 34x7	DP34x7	Lyc HD	8-3 1/2 x 4 1/2	298.6	33.8	115-3300	L	GCC	2 1/2	10	5	PC	No	Ha	V	D-R	D-R	13
3 1/2 Ton																									
14	Acme.....45D	3740	125	Op	14050	4850	B 7.50/20	B 10.50/20	Her OXC	4-4 1/2 x 5 1/2	283.5	28.9	55-2000	L	GCC	2 1/2	9 1/2	3	FP	Pe	Zen	G	El	A-L	14
15	Amer. LaFrance 12R.....	Op	Op	20000	.....	7400	P 36x8	DP36x8	Own	6-4 1/2 x 5 1/2	411.0	40.8	83-2100	L	GCC	2 1/2	12 1/2	7	FP	Pe	Bu	V	D-R	D-R	15
16	Atterbury.....70	222	222	2300	0	840	B 9.75/20	DB9.75/20	Con 20R	6-4 1/2 x 5 1/2	380.0	40.8	87-2400	L	GCC	2 1/2	12 1/2	7	FP	Pe	Bu	V	D-R	D-R	16
17	Autocar.....HS	4600	114	161	24000	6550	P 40x8	DP40x8	Own	6-4 1/2 x 5 1/2	350.0	32.4	45-1450	L	GCC	2 1/2	14 1/2	7	FP	Pe	Bu	V	D-R	D-R	17
18	Autocar.....3-3 1/2 T-SEH	4800	114	161	24000	7900	P 40x8	DP40x8	Own	6-4 1/2 x 5 1/2	404.0	43.4	92-2400	L	GCC	2 1/2	14 1/2	7	FP	Pe	Bu	V	D-R	D-R	18
19	Autocar.....SCHS	4800	157	203	24000	7900	P 40x8	DP40x8	Own	6-4 1/2 x 5 1/2	404.0	43.4	92-2400	L	GCC	2 1/2	14 1/2	7	FP	Pe	Bu	V	D-R	D-R	19
20	Autocar.....3-3 1/2 T-TEA	5350	192	242	22000	8900	P 36x8	DP36x8	Own	6-4 1/2 x 5 1/2	404.0	43.4	92-2400	L	GCC	2 1/2	14 1/2	7	FP	Pe	Bu	V	D-R	D-R	20
21	Brockway.....195, 3-4 T	170	224	19500	.....	7500	P 36x8	DP36x8	Con	6-4 1/2 x 5 1/2	380.9	40.8	85-2400	H	GCC	2 1/2	13 1/2	7	CC	Pe	Bu	V	D-R	D-R	21
22	Clinton.....85-6	4400	190	Op	16975	5975	P 34x7	DP34x7	Bud BUS	6-4 1/2 x 5 1/2	386.4	38.4	74-2400	L	GCC	2 1/2	9 1/2	4	FP	No	Str	V	El	D-R	22
23	Coleman D-40X 3 1/2-5T	130	184	21100	.....	9700	P 40x8	P 40x8	Bud BA6	6-4 1/2 x 5 1/2	411.0	40.8	85-2400	L	GCC	2 1/2	9 1/2	4	FP	No	Str	V	El	D-R	23
24	Commerce.....JLK-6	4500	202	222	19400	8200	P 36x6	S 36x12	Bud BA6	6-4 1/2 x 5 1/2	411.0	40.8	85-2400	L	GCC	2 1/2	9 1/2	4	FP	No	Str	V	El	D-R	24
25	Concord.....JLK-6	4500	202	222	19400	8200	P 36x6	S 36x12	Bud BA6	6-4 1/2 x 5 1/2	411.0	40.8	85-2400	L	GCC	2 1/2	9 1/2	4	FP	No	Str	V	El	D-R	25
26	Duplex.....EF	130	.....	17000	.....	6500	P 36x8	S 36x8	Bud EBU-I	6-4 1/2 x 5 1/2	312.0	28.9	57-2100	L	GCC	2 1/2	10 1/2	3	PS	No	Zen	V	El	D-R	26
27	Federal.....U6-3 1/2 T	3860	165	218	19000	7220	P 34x7	DP34x7	Con 18R	6-4 1/2 x 5 1/2	339.3	33.8	85-2200	H	GCC	2 1/2	13 1/2	7	PC	Pe	Bu	V	D-R	D-R	27
28	Fisher-Standard Sup. 6	157	206	20000	.....	6800	P 34x7	DP34x7	Con 18R	6-4 1/2 x 5 1/2	339.3	33.8	81-2400	H	GCC	2 1/2	13 1/2	7	FP	Co	Zen	V	D-R	D-R	28
29	Fisher-Standard Sup. 6	157	206	20000	.....	7100	P 34x7	DP34x7	Con 18R	6-4 1/2 x 5 1/2	339.3	33.8	81-2400	H	GCC	2 1/2	13 1/2	7	FP	Co	Zen	V	D-R	D-R	29
30	Fisher-Standard Sup. 6	157	206	20000	.....	7200	P 36x8	DP36x8	Con 21R	6-4 1/2 x 5 1/2	427.5	45.9	102-2400	H	GCC	2 1/2	13 1/2	7	FP	Co	Zen	V	D-R	D-R	30
31	Fisher-Standard Sup. 6	157	206	20000	.....	7500	P 36x8	DP36x8	Con 21R	6-4 1/2 x 5 1/2	427.5	45.9	102-2400	H	GCC	2 1/2	13 1/2	7	FP	Co	Zen	V	D-R	D-R	31
32	Freeman BASP 3 1/2-4 T	5500	144	144	.....	7760	P 38x9	DP38x9	Bud BA6	6-4 1/2 x 5 1/2	411.0	40.8	78-2250	L	GCC	2 1/2	9 1/2	4	PC	Bu	Str	V	El	D-R	32
33	F.W.D.....CU-6	5120	148	180	16720	7200	P 38x9	P 38x9	Wau SRS	6-4 1/2 x 5 1/2	411.0	40.8	92-2300	L	GCC	2 1/2	13 1/2	7	PC	Wa	Zen	V	El	D-R	33
34	Garford.....80	5250	175	192	.....	8200	P 36x6	S 36x12	Bud BA6	6-4 1/2 x 5 1/2	411.0	40.8	85-2400	L	GCC	2 1/2	9 1/2	4	PC	Bu	Zen	V	El	D-R	34
35	(X) Gen. Mot.....T42	1960	141	181	15000	4905	P 36x6	DP36x6	Bulck	6-3 1/2 x 4 1/2	257.5	28.3	76-2500	H	GCC	2 1/2	8 1/2	4	PC	Ha	Mar	M	D-R	D-R	35
36	(X) Gen. Mot.....T44	2080	141	181	16000	5005	P 36x6	DP36x6	Bulck	6-3 1/2 x 4 1/2	257.5	28.3	76-2500	H	GCC	2 1/2	8 1/2	4	PC	Ha	Mar	M	D-R	D-R	36
37	Gotfredson.....RW 6A	160	.....	180	.....	5005	P 36x6	S 36x10	Bud EBU-I	6-4 1/2 x 5 1/2	428.4	45.9	48-1850	L	GCC	2 1/2	9 1/2	4	PC	Pe	Str	V	El	D-R	37
38	Gotfredson.....RW 6A	160	.....	180	.....	5005	P 36x6	S 36x10	Bud EBU-I	6-4 1/2 x 5 1/2	428.4	45.9	48-1850	L	GCC	2 1/2	9 1/2	4	PC	Pe	Str	V	El	D-R	38
39	Gramm-Bernstein.....A	Op	212	20000	.....	7450	P 36x8	DP36x8	Con 18R	6-4 1/2 x 5 1/2	339.3	33.8	82-2400	L	GCC	2 1/2	13 1/2	7	FP	Ha	Zen	V	D-R	D-R	39
40	Hug.....C87, 87M	120	.....	21800	.....	7500	P 36x8	DP36x8	Bud DW6	6-4 1/2 x 5 1/2	330.0	33.7	70-2100	L	GCC	2 1/2	9 1/2	4	PC	Bu	Zen	V	D-R	D-R	40
41	Indiana.....195, 3-4 T	170	224	19500	.....	7500	P 36x8	DP36x8	Con	6-4 1/2 x 5 1/2	330.0	33.7	70-2100	L	GCC	2 1/2	9 1/2	4	PC	Bu	Zen	V	D-R	D-R	41
42	International.....HS-74	170	224	19500	.....	7500	P 36x8	DP36x8	Con	6-4 1/2 x 5 1/2	330.0	33.7	70-2100	L	GCC	2 1/2	9 1/2	4	PC	Bu	Zen	V	D-R	D-R	42
43	International.....W2	148	200	.....	.....	8400	P 36x5	S 36x10	Has 152	4-4 1/2 x 5 1/2															

Line Number	Radiator Make	Clutch		Gear Set		Universal Make and No.	Rear Axle			Front Axle		Brakes		Steering Gear Make	Frame		Body Mounting Data		Springs		Line Number		
		Type and Make	Make and Model	Location	No. of Forward Speeds	Aux. Locat. and Speeds	Make and Model	Final Drive and Type	Gear Ratios	Make and Model	Make and Model	Service	Area Service Brakes		Dim. Side Rail	Type	Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	Front	Rear		
1	McC	D-B-L	Own	U	4	Opt	Cle	Own	Tim 56200H	WF	H 6.14	40.5	Own	14703 H	L4IH	344	TX	Ros	7x3x1/4	3	40x2 1/2	54x3	1
2	Lon	D-B-L	B-L 35	U	4	No	Spl	Tim 56200H	WF	R 6.17	33.0	Tim 15733 H	L4IH	578	TX	Ros	7x3x1/4	3	40x2 1/2	54x3	50x3	2	
3	Fed	Ful	Ful VU	U	5	Opt	Spl	Tim 56200H	WF	R 6.17	33.0	Tim 15733 H	L4IH	578	TX	Ros	7x3x1/4	3	40x2 1/2	54x3	50x3	3	
4	Mod	B-L	B-L	U	4	A3	Spl	Tim	WF	R 7.4	47.5	Tim	B4IM	...	TX	Ros	9x2 1/4 x 1 1/4	32	40x3	56x3 1/2	5	4	
5	Mod	B-L	B-L	U	4	A3	Spl	Tim	WF	R 7.4	47.5	Tim	B4IM	...	TX	Ros	9x2 1/4 x 1 1/4	32	40x3	56x3 1/2	5	5	
6	Mod	P-B-L	B-L 314	U	4	Opt	Cle	Tim 14703H	WF	R 6.16	40.6	Tim	L4IHV	...	TX	Ros	12x3x1/4	33	40x2 1/2	60x3	60x3	6	6
7	Mod	P-B-L	B-L 314	U	4	Opt	Cle	Tim 14703H	WF	R 6.16	40.6	Tim	L4IHV	...	TX	Ros	12x3x1/4	33	40x2 1/2	60x3	60x3	6	7
8	Own	P-Own	Own 4B	U	4	No	Spl	Own 2CI	2F	R 7.6	49.7	Own 2DI	OPXMV	224	2I	Own	148x3 1/4 x 1 1/4	34	40x2 1/2	54x3 1/2	54x3 1/2	8	8
9	Own	P-Own	Own 4B	U	4	No	Spl	Own 10C	2F	R 6.3	41.4	Own 11D	OPXMV	224	2I	Own	148x3 1/4 x 1 1/4	34	40x2 1/2	54x3 1/2	54x3 1/2	8	9
10	Per	D-B-L	B-L 51	U	4	No	Spl	Tim 58000H	WF	R 6.83	36.5	Tim 15733H	L4IHV	650	CD	Ros	7x2 1/2 x 1 1/4	32	41x2 1/2	54x3 1/2	54x3 1/2	10	10
11	Per	D-B-L	B-L 51	U	4	No	Spl	Tim 58000H	WF	R 6.83	36.5	Tim 15733H	L4IHV	650	CD	Ros	7x2 1/2 x 1 1/4	32	41x2 1/2	54x3 1/2	54x3 1/2	10	11
12	Mod	D-B-L	B-L 51	U	4	No	Spl	Tim 56200H	WF	R 7.0	37.4	Tim 15733H	L4IHV	650	CD	Ros	7x2 1/2 x 1 1/4	32	41x2 1/2	54x3 1/2	54x3 1/2	12	12
13	Mod	dp. Lon	Ful MGU	U	4	No	Spl	Tim 56200H	WF	R 7.4	48.1	Shu 5432	L4IHV	578	TD	Ros	7x3x1/4	34	38x2 1/2	54x2 1/2	54x2 1/2	13	13
14	Per	D-B-L	B-L 51 5	U	5	No	Blo	Wls 8817B	2F	H 9.4	56.1	Shu 510	W2IM	534	2I	Ros	6x3 1/2 x 1 1/4	34	40x2 1/2	54x3	54x3	14	14
15	G&O	P-B&B	Own	A	4	...	Spl	Tim 65706BY	WF	R 6.00	66.0	Tim 15733BY	L4IH	...	...	Ros	8x3 1/2 x 1 1/4	34	40x3	56x3 1/2	56x3 1/2	15	15
16	Per	D-B-L	B-L 51-5	U	5	...	Spl	Tim 65720H	WF	R 8.50	62.9	Tim 35000H	L4IH	...	...	Ros	8x3 1/2 x 1 1/4	34	40x3	56x3 1/2	56x3 1/2	16	16
17	Own	dp. Lon	Own T	U	4	No	Spl	Own C	2F	H 8.46	53.6	Own J	O2IM	516	2IM	Ros	7x2 1/2 x 1 1/4	34	41x2 1/2	53x3	53x3	17	17
18	Own	dp. Lon	Own T	U	4	No	Spl	Own C	2F	H 8.46	53.6	Own J	O2IM	516	2IM	Ros	7x2 1/2 x 1 1/4	34	41x2 1/2	53x3	53x3	18	18
19	Own	dp. Lon	Own T	U	4	No	Spl	Own C	2F	H 8.46	53.6	Own J	O2IM	516	2IM	Ros	7x2 1/2 x 1 1/4	34	41x2 1/2	53x3	53x3	19	19
20	Own	dp. Lon	Own T	U	12	A2	Spl	Own TE	2F	H 7.09	10.1	Tim 26450	L4IH	602	TD	Ros	9x3x1/4	34	42x3 1/2	54x3 1/2	54x3 1/2	20	20
21	G&O	D-B-L	B-L	U	4	No	Spl	Wls	2F	R 6.8	49.5	Shu	L4IHV	471	CD	Ros	8x3 1/2 x 1 1/4	34	40x2 1/2	54x3	54x3	21	21
22	Per	B-L	B-L 55	U	4	No	Blo	Tim 65706 HP	WF	R 7.75	73.7	Tim 15302	T2IMV	...	...	Ros	8x3 1/2 x 1 1/4	34	41x3 1/2	51 1/2 x 3	51 1/2 x 3	22	22
23	R-T	D-Ful	Ful RU16	U	8	A2	Spl	Wls	2F	R 8.33	159	Wls	W2/4IM	...	...	Ros	12x2 1/2 x 1 1/4	31	40x3	48x3	48x3	23	23
24	Lon	D-B-L	B-L 60 Max	U	7	No	Spl	Tim 65706DP	WF	R 10.3	98.2	Tim 16302	T2IMV	520	TD	Ros	7x3x1/4	34	38 1/2 x 3 1/2	50 1/2 x 3 1/2	50 1/2 x 3 1/2	24	24
25	Own	D-B-L	B-L 51	U	4	No	Spl	Tim 65706DP	WF	R 10.3	98.2	Tim 16302	T2IMV	520	TD	Ros	7x3x1/4	34	38 1/2 x 3 1/2	50 1/2 x 3 1/2	50 1/2 x 3 1/2	25	25
26	Lon	D-B-L	B-L	U	8	A2	Pet	Own	2F	R 8.00	86.0	Own	OP4M	...	...	Ros	6x3 1/2 x 1 1/4	34	42x3 1/2	54x3	54x3	26	26
27	Lon	P-B&B	B-L 55	U	7	No	P-8 4	Tim 65706 HP	WF	R 6.8	64.6	Own	L4IHV	707	TI	Ros	7 1/2 x 3 1/2 x 1 1/4	34	42x2 1/2	54x3	54x3	27	27
28	Lon	D-B-L	B-L 55	U	7	No	Blo	Tim 58200H	WF	R 7.8	74.2	Tim 15733H	L4IHV	660	TD	Ros	7 1/2 x 2 1/2 x 1 1/4	32	43x2 1/2	54x3	54x3	28	28
29	Lon	D-B-L	B-L 55	U	7	No	Blo	Tim 65720H	WF	R 8.5	80.8	Tim 15733H	L4IHV	768	TD	Ros	7 1/2 x 2 1/2 x 1 1/4	32	43x2 1/2	54x3	54x3	29	29
30	Lon	D-B-L	B-L 55	U	7	No	Blo	Tim 65720H	WF	R 8.5	80.8	Tim 15733H	L4IHV	768	TD	Ros	7 1/2 x 2 1/2 x 1 1/4	32	43x2 1/2	54x3	54x3	30	30
31	Lon	D-B-L	B-L 55	U	7	No	Blo	Tim 65720H	WF	R 8.5	80.8	Tim 15733H	L4IHV	768	TD	Ros	7 1/2 x 2 1/2 x 1 1/4	32	43x2 1/2	54x3	54x3	31	31
32	Lon	D-Ful	Ful H U 16	U	8	A2	BC	Own	I	R 8.53	155	Own	OP4XM	336	RX	Woh	7x3 1/2 x 1 1/4	34	52x3	52x4	52x4	32	32
33	Per	O-H-S	Own	U	5	Op	Blo	Own U	BF	H 8.9	88.6	Own U	O4XM	252	2I	Ros	7x3x1/4	34	42 1/2 x 2 1/2	52 1/2 x 2 1/2	52 1/2 x 2 1/2	33	33
34	Lon	D-B-L	B-L 60 Max	U	7	No	Spl	Tim 66700DP	WF	R 10.3	98.2	Tim 16302	B4IM	524	TX	Ros	6 1/2 x 3 1/2	34	38x2 1/2	50x3	50x3	34	34
35	Lon	D-B-L	B-L 60 Max	U	7	No	Spl	Eat 1717	2F	H 6.57	33.4	Eat 433F	B4IM	524	TX	Ros	6 1/2 x 3 1/2	34	38x2 1/2	50x3	50x3	35	35
36	Lon	D-B-L	B-L 60 Max	U	7	No	Spl	Eat 1717	2F	H 6.57	33.4	Eat 433F	B4IM	524	TX	Ros	6 1/2 x 3 1/2	34	38x2 1/2	50x3	50x3	36	36
37	McC	D-B-L	B-L 55 Max	U	7	No	Spl	Tim 65706dhp	WF	R 9.3	88.6	Tim 15730H	B4IM	...	...	Ros	6 1/2 x 3 1/2	34	38x2 1/2	50x3	50x3	37	37
38	Lon	D-B-L	B-L 55-7	U	7	No	Spl	Tim 65706dhp	WF	R 9.3	88.6	Tim 15730H	B4IM	...	...	Ros	6 1/2 x 3 1/2	34	38x2 1/2	50x3	50x3	38	38
39	You	D-B-L	B-L 55 Max	U	7	No	Blo	Tim 65706H	WF	R 7.25	68.8	Tim 15733-H	L4IHV	490	TD	Ros	7 1/2 x 3 1/2 x 1 1/4	34	42x2 1/2	56x3	56x3	39	39
40	You	D-B-L	B-L 55	U	7	No	Blo	Wls 1237Q	2F	H 8.64	82.1	Shu 610	W2IM	420	TD	Ros	7 1/2 x 3 1/2 x 1 1/4	34	41 1/2 x 2 1/2	54x3	54x3	40	40
41	G&O	D-B-L	B-L 55	U	4	No	Spl	Wls	2F	R 6.8	49.5	Shu	L4IHV	471	CD	Ros	8x3 1/2 x 1 1/4	34	40x2 1/2	54x3	54x3	41	41
42	Own	P-Own	Own	U	5	No	Own	Eat 74	2F	R 7.95	83.9	Eat 74F	BE4IM	710	2I	Own	7x3x1/4	34	41 1/2 x 3	56x3 1/2	56x3 1/2	42	42
43	Own	P-Own	Own	U	5	No	Own	Own 1200	2F	R 9.95	83.9	Own 400	BE4IM	710	2I	Own	7x3x1/4	34	41 1/2 x 3	56x3 1/2	56x3 1/2	43	43
44	Own	P-Own	Own	U	5	No	Own	Own	CD	B 8.81	79.1	Eat 74F	BO4IM	736	4I	Own	8x3x1/4	34	44x3	54x4	54x4	44	44
45	Per	D-B-L	B-L 60	U	8	A3	Spl	Tim 65706H	WF	R 6.8	62.0	Tim 26450H	L4IH	508	TD	Ros	9x3x1/4	34	42x2 1/2	56x3	56x3	45	45
46	Per	D-B-L	B-L	U	5	A3	Spl	Tim 65706H	WF	R 7.8	74.0	Tim 15733H	L4IHV	649	FD	Ros	9x3x1/4	34	42x2 1/2	56x3 1/2	56x3 1/2	46	46
47	Own	D-B-L	B-L 55	U	4	No	Spl	Tim 65001H	WF	R 7.75	41.5	Tim 15733H	L4IHV	676	FD	Ros	7x3 1/2 x 1 1/4	34	44x2 1/2	52x3	52x3	47	47
48	Per	D-Ful	Ful MGU	U	4	No	Spl	Tim 65001H	WF	R 7.75	41.5	Tim 15733H	L4IHV	676	FD	Ros	7x3 1/2 x 1 1/4	34	44x2 1/2	52x3	52x3	48	48
49	Per	D-B-L	B-L 51	U	4	No	Spl	Tim 65200D	WF	R 7.4	40.0	Tim 15733H	L4IH	650	TD	Ros	8x3 1/2 x 1 1/4	34	40x2 1/2	54x3	54x3	49	49
50	Lon	D-B-L	B-L 51	U	4	No	Pet	Tim 65001H	WF	R 6.7	36.1	Tim 15733H	L4IH	650	TD	Ros	8x3 1/2 x 1 1/4	34	40x2 1/2	54x3	54x3	50	50
51	Mod	D-B-L	B-L 55	U	4	No	Pet	Tim 65001H	WF	R 6.7	36.1	Tim 15733H	L4IH	650	TD	Ros	8x3 1/2 x 1 1/4	34	40x2 1/2	54x3	54x3	51	51
52	You	D-Ful	Ful MGOG	U	8	A	Spl	Wls 1567H	2F	R 9.11	74.7	Shu 5532	L4IH	520	TD	Ros	6x3 1/2 x 1 1/4	34	40x2 1/2	54x3	54x3	52	52
53	Mod	D-B-L	B-L 60	U	7	No	Blo	Own	2F	H 8.94	84.9	Own	Own	142	2I	Ros	7x2 1/2 x 1 1/4	34	42 1/2 x 4	50x3	50x3	53	53
54	Lon	D-B-L	B-L 60	U	7	No	Blo	Own	2F	H 8.94	84.9	Own	Own	142	2I	Ros	7x2 1/2 x 1 1/4	34	42 1/2 x 4	50x3	50x3	54	54
55	Lon	P-B&B	Cov SHO	U	8	...	Blo	Own 74	2R	R 9.95	84.2	Tim 16302	L4IH	584	FX	Ros	7x3 1/2 x 1 1/4	34	42x2 1/2	54x3	54x3	55	55
56	Lon	P-B&B	B-L 60 Max	U	7	No	Spl	Tim 66700DP	WF	R 10.3	98.2	Tim 16302	L4IHV	387	TX	Ros	7x2x1/4	34	48x3	54x3	54x3	56	56
57	Hex	D-B-L	B-L 51	U	4	Op	Spl	Tim 65000H	WF	R 8.5	45.5	Tim 15733H	L4IHV	398	TX	Ros	6x2x1/4	34	48x3	54x3	54x3	57	57
58	Hex	D-B-L	B-L 51	U	5	No	Spl	Wls 8317L	WF	R 8.25	49.2	Shu 5429	L4IH	398	TX	Ros	6x2x1/4	34	48x3	54x3	54x3	58	58
59	Mod	D-Ful	Ful	U	12	A3	Spl	Tim	WF	R 7.3	1												



Line Number	Make, Model and Capacity	General			Tire Size		Make and Model	Engine										Fuel System		Electrical System		Line Number					
		Chassis Price	Standard W.B.	Max. W.B. Furnished	Gross Vehicle Wt. (See Key Note)	Chassis Wt. (Stripped)		Front	Rear	Number of Cylinders Bore and Stroke	Piston Displacement	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Valve Arrangement	Camshaft Drive	Piston Material	Dia. Main Bearings	Length Main Bearings	No. Main Bearings	Oiling System	Governor Make		Carburetor Make	Fuel Feed	Ignition System Make	Generator, Starter Make	
4 Ton—Cont'd																											
1	Relay.....	80	5380	175	192	8800	P 38x7	S 40x14	Bud BA 6	6-4 1/2 x 5 1/2	411	40.8	90-2400	L	G	C	2 1/2	10	4	PC	Bu	Zen	V	A-L	A-L	1	
2	Schacht De Luxe 30	174	199	.....	.....	7100	B 9.00/20	DB 9.00/20	Her WXC	6-4 1/2 x 5 1/2	339	38.4	73-2200	L	G	C	2 1/2	10	4	PC	Bu	Zen	V	A-L	A-L	2	
3	Service.....	80	5330	175	192	8400	S 36x14	Bud BA 6	Wau SRL	6-4 1/2 x 5 1/2	462	45.9	90-2000	L	G	C	2 1/2	13 1/2	7	FP	Wau	Str	P	D-R	D-R	3	
4	Ward La France 35R	.....	Op	Op	21000	8100	B 9.00/20	DB 9.00/20	Wau SRL	6-4 1/2 x 5 1/2	462	45.9	97-2000	L	G	C	2 1/2	13 1/2	7	FP	Wau	Str	P	D-R	D-R	4	
5	Ward La France 42EB	.....	Op	Op	21000	8100	B 9.00/20	DB 9.00/20	Wau SRL	6-4 1/2 x 5 1/2	462	45.9	97-2000	L	G	C	2 1/2	13 1/2	7	FP	Wau	Str	P	D-R	D-R	5	
6	Witt-Will.....	84	4440	159	.....	8000	P 36x8	DP36x8	Con 20R	6-4 1/2 x 4 1/2	381	40.8	88-2200	H	C	C	2 1/2	13 1/2	7	FP	No	Zen	E	D-R	D-R	6	
7	Witt-Will.....	84	4440	159	.....	8000	P 36x8	DP36x8	Con 21R	6-4 1/2 x 4 1/2	427	45.9	100-2600	H	C	C	2 1/2	13 1/2	7	FP	No	Zen	E	D-R	D-R	7	
8	World.....	DA-115	3595	168	182	6100	P 36x8	DP36x8	Lye HD	8-3 1/2 x 4 1/2	298.6	33.8	115-3300	L	C	C	2 1/2	10	5	PC	Ha	Zen	M	A-L	A-L	8	
4 1/2 Ton																											
9	(X) Gen. Mot.....	T44	2095	141	181	16000	P 34x7	DP34x7	Buick	6-3 1/2 x 4 1/2	257.5	28.3	76-2500	H	G	C	2 1/2	8 1/2	4	PC	Ha	Mar	M	D-R	D-R	9	
10	(X) Gen. Mot.....	T51	2565	155	200	19000	P 34x7	DP34x7	Own 331	6-3 1/2 x 4 1/2	331.4	33.7	94-2500	H	G	C	2 1/2	8 1/2	4	PC	Ha	Mar	M	D-R	D-R	10	
11	(X) Gen. Mot.....	T55	2890	155	200	19000	P 34x7	DP34x7	Own 331	6-3 1/2 x 4 1/2	331.4	33.7	94-2500	H	G	C	2 1/2	8 1/2	4	PC	Ha	Mar	M	D-R	D-R	11	
12	Larrabee 85.....	5500	168	206	23650	8800	B 9.75/20	DB 9.75/20	Con 21R	6-4 1/2 x 5 1/2	427.5	45.9	100-2600	H	G	C	2 1/2	13 1/2	7	FP	Wau	Str	P	D-R	D-R	12	
13	Ster. DW18-64.4 1/2 x 6 1/2	.....	Op	Op	1860	6850	S 36x5	S 36x10	Wau 6KX	6-4 1/2 x 5 1/2	358	38.4	71-2000	L	G	C	2 1/2	13 1/2	7	FP	Wau	Str	P	D-R	D-R	13	
14	Ster. DC19-64.4 1/2 x 5 1/2	.....	Op	Op	163	6500	S 36x5	S 36x10	Wau 6KX	6-4 1/2 x 5 1/2	298.2	33.7	61-2000	L	G	C	2 1/2	13 1/2	7	FP	Wau	Str	P	D-R	D-R	14	
15	Ward La France 45D	.....	Op	Op	24000	8600	P 36x8	DP36x8	Wau SRL	6-4 1/2 x 5 1/2	462	45.9	97-2000	L	G	C	2 1/2	13 1/2	7	FP	Wau	Str	P	D-R	D-R	15	
5 Ton																											
16	Acme.....	90L	4675	192	Op	21500	9100	S 36x5	S 40x12	Con B7	4-5x6	471.2	40.0	62-1500	L	G	C	2 1/2	10 1/2	3	FP	No	Str	V	Eis	Non	16
17	Am. La Fra.....	12R	160	Op	22000	7500	B 9.75/20	DB 9.75/20	Own	6-4 1/2 x 5 1/2	410.9	40.8	75-1800	L	G	C	2 1/2	9 1/2	4	FP	Bu	Zen	V	D-R	D-R	17	
18	Am. La F. Big. Ch. 16	6725	226	242	24000	10000	P 40x8	DP36x8	Her WXC2	6-4 1/2 x 5 1/2	572.5	48.6	115-1600	L	G	C	2 1/2	10 1/2	4	FP	On	Zen	V	D-R	D-R	18	
19	Armleder.....	61	Op	Op	19420	6700	P 36x8	DP36x8	Her WXC2	6-4 1/2 x 4 1/2	360	40.8	80-2200	L	G	C	2 1/2	10 1/2	4	FP	Ha	Zen	V	A-L	A-L	19	
20	Atterbury.....	100	Op	Op	237	28000	9100	B10.50/20	Con 21R	6-4 1/2 x 4 1/2	428.4	45.9	101-2400	H	G	C	2 1/2	13 1/2	7	FP	Ha	Zen	V	A-L	A-L	20	
21	Autocar 3 1/2 & 5 T. C	5500	172	186	26000	9500	P 38x9	DP42x9	Own	6-4 1/2 x 4 1/2	453	48.6	101-2400	L	G	C	2 1/2	14 1/2	7	FP	Pe	Str	V	D-R	D-R	21	
22	Autocar.....	TFA	6100	192	242	26000	9300	P 38x9	DP38x9	Own	6-4 1/2 x 4 1/2	453	48.6	101-2400	L	G	C	2 1/2	14 1/2	7	FP	Pe	Str	V	D-R	D-R	22
23	Available.....	T-50	Op	Op	22000	9300	B 9.75/20	DB 9.75/20	Wau GRB	6-5x5 1/2	677.4	60.0	125-2000	L	G	C	3 1/2	11 1/2	4	FP	Wau	Zen	V	D-R	D-R	23	
24	Brookway.....	220-4-5T	170	224	22000	8200	P 36x8	DP36x8	Con	6-4 1/2 x 4 1/2	427.5	45.9	100-2400	H	G	C	2 1/2	13 1/2	7	CC	KP	Zen	M	A-L	A-L	24	
25	Clinton.....	120L	5500	204	Op	27050	9550	S 36x6	DS40x7	Bud BTU	4-5x6 1/2	510.5	40.0	61-1400	L	G	C	2 1/2	12 1/2	3	PC	Bu	Zen	Spl	A-Bo	25	
26	Clinton.....	120L	5500	204	Op	27150	9650	S 36x6	DS40x7	Bud BTU	4-5x6 1/2	510.5	40.0	61-1400	L	G	C	2 1/2	12 1/2	3	PC	Bu	Zen	Spl	A-Bo	26	
27	Coleman X-100 5-6 T.	.....	144	184	24300	11200	P 42x9	P 42x9	Bud BA6	6-4 1/2 x 5 1/2	411	40.8	85-2400	L	G	C	2 1/2	10 1/2	4	FP	Bu	Zen	V	D-R	D-R	27	
28	Coleman X-100F 5-7 1/2	.....	144	184	24300	11300	P 42x9	P 42x9	Bud GL	6-4 1/2 x 5 1/2	572.5	48.6	120-2000	L	G	C	3 1/2	10 1/2	4	FP	Bu	Str	V	D-R	D-R	28	
29	Commerce.....	100	5830	175	192	9600	S 36x6	S 40x14	Bud BA6	6-4 1/2 x 5 1/2	411	40.8	83-2100	L	G	C	2 1/2	9 1/2	4	PC	Bu	Zen	V	A-L	A-L	29	
30	Concor.....	CHB	210	236	24000	10100	B 9.00/20	DB 9.00/20	Con 16H	6-4 1/2 x 5 1/2	611.4	54.1	127-2300	L	G	C	3 1/2	13 1/2	7	PC	Pe	Zen	M	A-L	A-L	30	
31	Concor.....	OCW	157	240	24000	9500	B 9.00/20	DB 9.00/20	Con 21R	6-4 1/2 x 4 1/2	428	45.9	100-2200	H	G	C	2 1/2	13 1/2	7	PC	No	Zen	M	A-L	A-L	31	
32	Corbitt.....	24W6	185	230	24800	9200	P 38x9	DP38x9	Con 20R	6-4 1/2 x 4 1/2	381	40.8	88-2200	H	C	C	2 1/2	13 1/2	7	FP	No	Zen	M	D-R	D-R	32	
33	Day Elder.....	240	5500	162	202	24000	9300	P 38x9	DP38x9	Con 21R	6-4 1/2 x 4 1/2	427.5	45.9	100-2600	H	G	C	2 1/2	13 1/2	7	FP	No	Zen	V	D-R	D-R	33
34	Douglas.....	F4	5525	185	Op	26000	9200	S 36x6	S 40x12	Bud BBU	4-5x6 1/2	510.5	40.0	61-1400	L	G	C	2 1/2	12 1/2	3	PC	Bu	Zen	E	L-N	L-N	34
35	Douglas.....	F6	6200	196	Op	26000	9200	B 9.75/38	DB 9.75/38	Bud GL6	6-4 1/2 x 5 1/2	572.5	48.6	114-1900	L	G	C	3 1/2	10 1/2	4	FP	Bu	Zen	E	L-N	L-N	35
36	Duplex.....	M 5-7 Ton	7650	Op	28000	10000	P 34x7	DP 34x7	Bud GL6	6-4 1/2 x 5 1/2	572.5	48.6	105-2200	L	G	C	3 1/2	10 1/2	4	FP	Co	Str	V	A-L	A-L	36	
37	Federal.....	4C6A 4-5 T	4735	192	231	22000	8300	P 36x8	DP 36x8	Con 20R	6-4 1/2 x 4 1/2	381	40.8	90-2200	H	C	C	2 1/2	13 1/2	7	PC	Co	Zen	M	D-R	D-R	37
38	Federal.....	4C6AB 4-5 T	4960	192	231	22000	8350	P 36x8	DP 36x8	Con 21R	6-4 1/2 x 4 1/2	381	40.8	90-2200	H	C	C	2 1/2	13 1/2	7	PC	Co	Zen	M	D-R	D-R	38
39	Fisher-Standard.....	100C	200	240	25000	9000	P 36x8	DP36x8	Con 21R	6-4 1/2 x 4 1/2	427.5	45.9	102-2400	H	G	C	2 1/2	13 1/2	7	FP	Co	Zen	V	R-Bo	R-Bo	39	
40	Freeman.....	BA-156	5900	156	.....	8490	P 36x8	DP36x8	Bud BA6	6-4 1/2 x 5 1/2	411	40.8	83-2000	L	G	C	2 1/2	9 1/2	4	FP	Bu	Str	V	R-Bo	R-Bo	40	
41	Freeman.....	BA-156	5900	156	.....	8490	P 36x8	DP36x8	Bud BA6	6-4 1/2 x 5 1/2	411	40.8	83-2000	L	G	C	2 1/2	9 1/2	4	FP	Bu	Str	V	R-Bo	R-Bo	41	
42	F.W.D.....	M5	7600	165	Op	24000	11000	B 12.75/20	B 12.75/20	Wau SRL	6-4 1/2 x 5 1/2	462	45.9	102-2200	L	G	C	3 1/2	13 1/2	7	PC	Wa	Zen	P	N-E	N-E	42
43	Garford.....	100	5830	175	192	9600	S 36x6	S 40x14	Bud BA6	6-4 1/2 x 5 1/2	411	40.8	83-2100	L	G	C	2 1/2	9 1/2	4	PC	Bu	Zen	V	A-L	A-L	43	
44	(X) Gen. Mot.....	T51	2565	157	200	19000	6100	P 34x7	DP34x7	Own 331	6-3 1/2 x 4 1/2	331.4	33.7	94-2500	H	G	C	2 1/2	8 1/2	4	PC	Ha	Mar	M	D-R		

[illegible]



Line Number	Make, Model and Capacity	General				Tire Size		Make and Model	Engine										Fuel System		Electrical System		Line Number			
		Chassis Price	Standard W.B.	Max. W.B. Furnished	Gross Vehicle Wt. (See Key Note)	Chassis Wt. (Stripped)	Front		Rear	Number of Cylinders Bore and Stroke	Piston Displacement	N.A.C.C. Rated H.P.	Max. Brake H.P. at Specified R.P.M.	Valve Arrangement	Camshaft Drive	Piston Material	Dia. Main Bearings	Length Main Bearings	No. Main Bearings	Oiling System	Governor Make	Carburetor Make		Fuel Feed	Ignition System Make	Generator, Starter Make
5½ Ton and More—Cont'd																										
1	G-P.....85-8, 5-7	6670	159	196	24000	9200	B10.50/20	DB10.50/2	Lye AED	8-3¼x4½	420	45.0	140-3000	L	G	C	3	11¼	5	.....	Wa	Str	M	A-L	A-L	1
2	G-P.....95-6, 7-10	6670	159	196	33000	10400	B10.50/24	DB10.50/2	Wau 6RB	6-5x5½	677.0	60.0	125-2000	L	G	C	3	11¼	4	.....	Wa	Str	M	A-L	A-L	2
3	Hahn & Selden 77 5-7	182	212	27800	10750	P 38x7	S 40x14	Con	Con	6-4½x5½	611.4	54.2	116-1800	L	G	C	3	13½	7	FF	Pe	Str	M	A-L	A-L	3
4	Indiana 290 7¼-10T	182	212	30000	10750	P 38x9	S 40x14	Wau 6AB	Wau 6AB	6-4½x5½	611.4	54.2	116-1800	L	G	C	3	13½	7	FF	Pe	Str	M	A-L	A-L	4
5	La Fran.-Republic 35-2	5500	156	240	24000	9250	S 36x6	DB40x6	Own AC	4-5x6	471.2	40.0	77-1800	L	G	S	3	10½	4	PS	On	Str	G	R-Bo	N-E	5
6	Mack AC.....	6550	174	240	24000	9250	S 36x6	DB10.50/24	Own BK	6-4½x5½	525.5	48.6	126-2200	L	G	S	3	10½	4	PS	On	Str	G	R-Bo	N-E	6
7	Mack AC.....	6550	174	240	24000	9250	S 36x7	DB40x7	Own AC	4-5x6	471.2	40.0	77-1800	L	G	S	3	10½	4	PS	On	Str	G	R-Bo	N-E	7
8	Mack AC.....	6550	174	240	24000	9250	S 36x7	DB40x8	Own AP	6-5x6	706.5	60.0	150-2000	L	G	S	3	11¼	4	PS	On	Str	G	R-Bo	N-E	8
9	Mack AP.....	9500	191	191	22000	8000	P 38x8	DP38x8	Her YXC	6-4½x5½	428.4	45.9	94-2200	L	G	C	3	15	7	PC	No	Zen	M	A-L	A-L	9
10	Moreland.....	5200	186	204	34000	12800	S 36x7	DB40x8	Own	6-4½x5½	611.4	54.1	130-2000	L	G	C	3	16½	7	PC	No	Zen	M	A-L	A-L	10
11	Pierce-Arrow.....	6900	168	204	29200	1200	B 9.75/24	DB9.75/24	Buda GF6	6-4½x6	638	54.1	118-1850	L	G	C	3	10½	4	PC	Ha	Zen	E	A-L	A-L	11
12	Schacht.....65 6 Ton	160	198	200	9000	S 36x5	S36x12	Wau SRL	Wau SRL	6-4½x5½	462	45.9	88-2000	L	G	B	3	.....	7	PC	Mo	Zen	G	A-L	A-L	12
13	Schacht.....70 7½ Ton	160	200	200	10500	S 36x7	DS 40x8	Wau SRL	Wau SRL	6-4½x5½	462	45.9	88-2000	L	G	B	3	.....	7	PC	Mo	Zen	G	A-L	A-L	13
14	Service.....100ZB	5830	175	180	9600	S 36x6	S 40x14	Bud BA6	Bud BA6	6-4½x5½	410.9	40.8	83-2100	L	G	C	3	9	4	PC	No	Zen	V	.....	A-Bo	14
15	Standard.....5-7	174	182	23000	79.0	S 36x5	S 40x10	Wau 6KS	Wau 6KS	4-4x5	315	38.4	71-2000	L	G	C	3	13½	7	FF	Wa	Zen	V	.....	A-Bo	15
16	Ster. DC 23-64 5½-7	166	180	23000	8400	S 36x5	S 36x12	Wau 6KS	Wau 6KS	6-4x4½	358	38.4	71-2000	L	G	C	3	13½	7	FF	Wa	Zen	V	.....	A-Bo	16
17	Ster. DC 23-64 5½-7	166	180	23000	8400	S 36x5	S 36x12	Wau 6KS	Wau 6KS	6-4x4½	358	38.4	71-2000	L	G	C	3	13½	7	FF	Wa	Zen	V	.....	A-Bo	17
18	Sterling DW20-64 5-6	174	192	27000	9765	S 36x6	S 40x4	Wau 6SRL	Wau 6SRL	6-4½x5½	462	46.0	88-2000	L	G	A	3	13½	7	FF	Wa	Zen	V	.....	A-Bo	18
19	Sterling EW27-64 7-8½	174	192	27000	9765	S 36x6	S 40x4	Wau 6SRL	Wau 6SRL	6-4½x5½	462	46.0	88-2000	L	G	A	3	13½	7	FF	Wa	Zen	V	.....	A-Bo	19
20	Sterling DC26-64 7-8½	174	192	27000	9765	S 36x6	S 40x4	Wau 6SRL	Wau 6SRL	6-4½x5½	462	46.0	88-2000	L	G	A	3	13½	7	FF	Wa	Zen	V	.....	A-Bo	20
21	Sterling DC27-64 7-8½	174	188	27000	9900	P 40x8	S40x12	Wau 6B	Wau 6B	6-4½x5½	489	43.3	90-1900	L	G	C	3	11½	4	FF	Wa	Zen	V	.....	A-Bo	21
22	Sterling EC29-66 8¼-10	182	200	29000	10380	S 36x6	S 40x14	Wau 6AB	Wau 6AB	6-4½x5½	549	48.6	98-1850	L	G	C	3	11½	4	FF	Wa	Zen	V	.....	A-Bo	22
23	Sterling EC35-66 10-12	182	200	35000	10930	S 36x6	S 40x14	Wau 6AB	Wau 6AB	6-4½x5½	549	48.6	98-1850	L	G	C	3	11½	4	FF	Wa	Zen	V	.....	A-Bo	23
24	Stewart 27X 6-7 Ton	5700	165	235	9987	P 36x7	P 40x7	Wau 6SRL	Wau 6SRL	6-4½x5½	462	45.9	100-2000	L	G	C	3	12½	7	FF	Wa	Str	V	D-R	D-R	24
25	Walter.....FHR8 7½-T	8000	Op	136	31000	10600	B10.50/24	DB10.50/24	Own 6	6-4½x5½	549	48.6	100-1800	L	G	C	3	10½	4	FF	Wa	Str	V	D-R	D-R	25
26	Ward La France 50D-7	5700	Op	28000	9900	P 40x8	DP40x8	Wau SRL	Wau SRL	6-4½x5½	462	45.9	97-2000	L	G	C	3	13½	7	FF	Wa	Str	P	D-R	D-R	26
27	Ward La France 70C-7	5550	Op	28000	10500	S 36x7	DB40x8	Wau SRL	Wau SRL	6-4½x5½	462	45.9	97-2000	L	G	C	3	13½	7	FF	Wa	Str	P	D-R	D-R	27
28	Ward La Fra. 7B6-7½	6300	Op	28000	10500	S 36x7	DB40x8	Wau AB	Wau AB	6-4½x5½	540	48.6	100-1800	L	G	S	3	11½	4	FF	Wa	Str	P	D-R	D-R	28
29	White.....52 5100 174 215	28000	9409	S 36x6	S 40x12	Own GRB	Own 3A	Own 3A	Own 3A	6-4½x5½	326.3	28.9	54-1600	L	G	C	3	11½	3	FF	On	Zen	M	D-R	D-R	29
30	White.....59A 6000 155 244	28000	9775	P 40x8	S 40x14	Own 3A	Own 3A	Own 3A	Own 3A	6-4x5½	396	38.4	72-1800	L	G	C	3	12½	7	FF	On	Zen	M	D-R	D-R	30
31	White.....R55 5700 159	27000	9500	P 38x9	DP38x9	Con 21R	Con 21R	Con 21R	Con 21R	6-4½x5½	427.5	45.9	100-2600	H	C	S	3	13½	7	FF	On	Zen	M	D-R	D-R	31
32	Witt-Will.....	5700	159	27000	9500	P 38x9	DP38x9	Con 21R	Con 21R	6-4½x5½	427.5	45.9	100-2600	H	C	S	3	13½	7	FF	On	Zen	M	D-R	D-R	32
Six-Wheelers																										
33	Autocar.....CG 5T	8250	196	30000	12500	P 36x8	DP36x8	Own	Own	6-4½x4½	453.0	48.6	101-2400	L	G	C	3	14½	7	FF	Pe	Str	V	D-R	L-N	33
34	Autocar.....G 10T	9000	212	336	36000	P 36x8	DP36x8	Own	Own	6-4½x4½	453.0	48.6	101-2400	L	G	C	3	14½	7	FF	Pe	Str	V	D-R	L-N	34
35	Brockway.....1-56-D	174	222	35740	12740	B 9.75/20	DB9.75/20	Wau 6SRL	Wau 6SRL	6-4½x5½	462	45.9	97-2000	L	G	A	3	13½	7	FF	Pe	Str	M	A-L	A-L	35
36	Chicago.....	174	222	35740	12740	B 9.75/20	DB9.75/20	Wau 6SRL	Wau 6SRL	6-4½x5½	462	45.9	97-2000	L	G	A	3	13½	7	FF	Pe	Str	M	A-L	A-L	36
37	Day Elder 255 8 Ton	6000	164	204	25500	12000	B 8.25/20	DB8.25/20	Con 21R	6-4½x4½	427.5	45.9	100-2600	H	C	N	2½	13½	7	FF	Co	Zen	V	D-R	D-R	37
38	Day Elder 345 10 Ton	7500	164	204	34500	12500	B9.00/20	DB9.00/20	Con 21R	6-4½x4½	427.5	45.9	100-2600	H	C	N	2½	13½	7	FF	Co	Zen	V	D-R	D-R	38
39	Day Elder 402 12 Ton	9000	164	204	40200	14000	B9.75/20	DB9.75/20	Con 16-H	6-4½x4½	611.4	54.2	127-2300	L	G	A	3	13½	7	FF	Co	Zen	M	D-R	D-R	39
40	Diamond T.....1200 6T	5000	189	219	21000	9000	P 34x7	DP34x7	Her YXC	6-4½x4½	380.9	40.8	90-2200	L	G	C	3	13½	7	FF	Co	Zen	M	A-L	A-L	40
41	Diamond T.....1200 6T	5000	189	219	21000	9000	P 34x7	DP34x7	Her YXC-2	6-4½x4½	380.9	40.8	90-2200	L	G	C	3	13½	7	FF	Co	Zen	M	A-L	A-L	41
42	Diamond T.....1601 8T	7500	184	224	36000	12500	P 36x8	DP36x8	Wau 6RB	6-5x5½	677.4	60.0	126-1800	L	G	C	3	11½	4	PC	Wa	Zen	M	Bos	A-L	42
43	Diamond T.....1601 8T	7500	184	224	36000	12500	P 36x8	DP36x8	Her YXC3	6-4½x4½	479.0	51.3	106-2200	L	G	C	3	15	7	PC	Ha	Zen	M	A-L	A-L	43
44	Douglas.....F66 5T	7900	210	Op	36000	10000	P 36x8	DP36x8	Bud GL6	6-4½x6	572.5	48.6	114-1900	L	G	C	3	10½	4	PC	Bu	Zen	E	L-N	L-N	44
45	Fagol.....4-66 4T	6900	195	220	25500	12500	P 36x8	DP36x8	Wau SRL	6-4½x5½	462.0	45.9	88-2200	L	G	A	3	13½	7	FF	Pe	Str	V	D-R	D-R	45
46	Fagol.....4-66 4T	6900	195	220	25500	12500	P 36x8	DP36x8	Wau SRL	6-4½x5½	462.0	45.9	88-2200	L	G	A	3	13½	7	FF	Pe	Str	V	D-R	D-R	46
47	Fagol.....10-66A	8850	230	36200	12870	P 36x6	DP36x6	Wau AB	Wau AB	6-4½x5½	549.															

Line Number	Radiator Make	Clutch	Gear Set		Universal Make and No.	Rear Axle				Front Axle				Brakes		Steering Gear Make	Frame		Body Mounting Data		Springs		Auxiliary Type	Line Number						
			Type and Make	Make and Model		Location	No. of Forward Speeds	Aux. Locat. and Speeds	Make and Model	Wheels Driven	Final Drive and Type	Drive and Torque	Gear Ratios Reduce. in High Reduce. in Low	Make and Model	Wheels Driven		Final Drive and Type	Drive and Torque	Gear Ratios Reduce. in High Reduce. in Low	Service	Area Service Brakes	Hand			Type	Cab to Rear of Frame	Cab to Rear Axle	Width of Frame	Front	Rear
1	Own	D.Ful	Ful MHU	U	4	A3	MM8	Wis 1567W	DF	R 9.00	113.	Tim27050T	B4IM	CD	Ros	14x3 1/2 x 3 1/2	184 1/2	11 1/2	34 1/2	42 1/2 x 3 1/2	61x5	58x4	1 1/2	1						
2	Own	D.B-L	Ful MHD	U	4	A3	MM8	Wis 19000W	DF	R 10.1	125.	Tim27450TW	B4IM	CD	Ros	14x3 1/2 x 3 1/2	159 1/2	8 3/4	34 1/2	42 1/2 x 3 1/2	61x5	58x4	1 1/2	2						
3	Own	D.B-L	B-L	U	7	No	Spl 4	Tim	WF	R 10.0	95.0	Shu	4IMV	TD	Ros	8x3 1/2 x 3 1/2	216	129	36	40x3	54x4	58x4	1 1/2	3						
4	Own	D.Ful	Ful HU	U	4	No	Spl 2	Wis 1567-H	2F	R 7.2	45.4	Tim 26450-H	L4IHV	FD	Han	9 1/2 x 3 1/2 x 3 1/2	182	99	36	44x3 1/2	60x3 1/2	58x4	1 1/2	4						
5	Own	P.Own	Own AC	A	4	No	Spl 2	Own AC	CD	R 6.46	41.5	Own AC	OJXM	TD	Ros	8x3 1/2 x 3 1/2	194 21	121	36	44x3 1/2	60x3 1/2	58x4	1 1/2	5						
6	Own	P.Own	Own AC	A	4	No	Spl 2	Own AC	CD	R 6.46	41.5	Own AC	OJXM	TD	Ros	8x3 1/2 x 3 1/2	194 21	121	36	44x3 1/2	60x3 1/2	58x4	1 1/2	6						
7	Own	P.Own	Own AC	A	4	No	Spl 2	Own AC	CD	R 6.46	41.5	Own AC	OJXM	TD	Ros	8x3 1/2 x 3 1/2	194 21	121	36	44x3 1/2	60x3 1/2	58x4	1 1/2	7						
8	Own	P.Own	Own AC	A	4	No	Spl 2	Own AC	CD	R 6.46	41.5	Own AC	OJXM	TD	Ros	8x3 1/2 x 3 1/2	194 21	121	36	44x3 1/2	60x3 1/2	58x4	1 1/2	8						
9	Own	P.Own	Own AC	A	4	No	Spl 2	Own AC	CD	R 6.46	41.5	Own AC	OJXM	TD	Ros	8x3 1/2 x 3 1/2	194 21	121	36	44x3 1/2	60x3 1/2	58x4	1 1/2	9						
10	Own	P.B-L	B-L 554	U	12	A 4	Cle	Tim66704WP	WF	R 9.00	99.2	Tim 16710 H	L4IHV	TI	Ros	9 1/2 x 3 1/2 x 3 1/2	182	113	34	39 1/2 x 2 1/2	56x3 1/2	56x3 1/2	1 1/2	10						
11	Lon	P.Lon	Own	A	4	No	Cle	Own	WF	A 11.7	61	Tim	W4IA	702 ID	Han	10x3 1/2 x 3 1/2	139	84 1/2	38 1/2	41x3	56x3 1/2	56x3 1/2	1 1/2	11						
12	Mod	P.B-L	B-L 1714	U	4	No	Blo	Own 85AH	2R	R 7.4	49.7	Tim 27450	L4IH	480 FX	Han	8 1/2 x 3 1/2 x 3 1/2	192	134	34	42x3	56x4	56x4	1 1/2	12						
13	Own	D.B-L	B-L 60	U	7	A 4	No	Own	2F	R 10.3	65.0	Own	L4IHV	628 TX	Own	8x2 1/2 x 3 1/2	152	95	35 1/2	42x3	60x3 1/2	56x3 1/2	1 1/2	13						
14	Own	D.B-L	B-L 70	U	7	A 4	No	Own	2F	R 10.3	65.0	Own	L4IHV	628 TX	Own	8x2 1/2 x 3 1/2	152	95	35 1/2	42x3	60x3 1/2	56x3 1/2	1 1/2	14						
15	Own	D.B-L	B-L 60	U	7	A 4	No	Own	2F	R 10.3	65.0	Own	L4IHV	628 TX	Own	8x2 1/2 x 3 1/2	152	95	35 1/2	42x3	60x3 1/2	56x3 1/2	1 1/2	15						
16	Own	D.B-L	B-L 60	U	7	A 4	No	Own	2F	R 10.3	65.0	Own	L4IHV	628 TX	Own	8x2 1/2 x 3 1/2	152	95	35 1/2	42x3	60x3 1/2	56x3 1/2	1 1/2	16						
17	Own	D.B-L	B-L 60	U	7	A 4	No	Own	2F	R 10.3	65.0	Own	L4IHV	628 TX	Own	8x2 1/2 x 3 1/2	152	95	35 1/2	42x3	60x3 1/2	56x3 1/2	1 1/2	17						
18	Hen	D.B-L	B-L 60	A	4	Op	Spl	Tim 68700	WF	R 10.0	53.5	Tim 16300	L4IHV	647 TX	Ros	7x2 1/2 x 3 1/2	144	98 1/2	34	48x3	54x3	54x3	1 1/2	18						
19	Hex	D.B-L	B-L 60	A	4	Op	Spl	Tim 66601D	WF	R 9.5	50.8	Tim 16300	T2IM	290 21	Han	9x2 1/2 x 3 1/2	158	97	38	48x3	60x4	60x4	1 1/2	19						
20	Hex	D.B-L	B-L 55	U	4	Op	Spl	Own	CD	R 4.9	49.1	Tim 15300	O2IM	500 JX	Ros	7x2 1/2 x 3 1/2	147	86	34	48x3	60x3 1/2	60x3 1/2	1 1/2	20						
21	Hex	D.B-L	B-L 55	U	4	Op	Spl	Own	CD	R 4.9	49.1	Tim 16300	O2IM	660 JX	Ros	9x2 1/2 x 3 1/2	147	86	34	48x3	54x3	54x3	1 1/2	21						
22	Per	D.B-L	B-L 55	U	4	Op	Spl	Own	CD	R 4.9	49.1	Tim 16300	O2IM	660 JX	Ros	9x2 1/2 x 3 1/2	147	86	34	48x3	54x3	54x3	1 1/2	22						
23	Hex	H-H-S	Own	A	6	Op	Spl	Own	CD	R 4.9	59.8	Tim 17300	O2IMV	660 TX	Han	9x2 1/2 x 3 1/2	158	97 1/2	38	48x3	60x4	60x4	1 1/2	23						
24	Hex	O-H-S	Own	A	6	Op	Spl	Own	CD	R 4.9	59.8	Tim 17300	O2IMV	660 TX	Han	9x2 1/2 x 3 1/2	158	97 1/2	38	48x3	60x4	60x4	1 1/2	24						
25	Own	P.Own	Own AC	A	4	No	Spl 2	Own AC	WF	R 6.56	93.8	Eat	B4IMV	TD	Ros	9 1/2 x 2 1/2 x 3 1/2	136 1/2	76 1/2	32	40x3	56x4	56x4	1 1/2	25						
26	Own	P.Own	Own AC	A	4	No	Spl 2	Own AC	WF	R 6.56	93.8	Eat	B4IMV	TD	Ros	9 1/2 x 2 1/2 x 3 1/2	136 1/2	76 1/2	32	40x3	56x4	56x4	1 1/2	26						
27	Own	P.B-L	B-L	A	4	No	Spl	Tim 68702	WF	Opt	Opt	Tim	T2IMV	Opt	Opt	Tim	8x3 1/2 x 3 1/2	Opt	Opt	Opt	37	44x3	56x4	56x4	1 1/2	27				
28	Own	P.B-L	B-L	A	4	No	Spl	Tim 68700	WF	Opt	Opt	Tim	T2IMV	Opt	Opt	Tim	8x3 1/2 x 3 1/2	Opt	Opt	Opt	37	44x3	56x4	56x4	1 1/2	28				
29	Own	P.B-L	B-L 7	A	4	No	Spl	Tim 68700D	WF	R 11.7	58.4	Own 52	T2IMV	Opt	Opt	Tim	8x3 1/2 x 3 1/2	Opt	Opt	Opt	37	44x3	56x4	56x4	1 1/2	29				
30	Own	P.Own	Own GRBA	A	4	No	Spl 3	Own 52	2F	R 11.7	58.4	Own 52	OPKX	224 21	Own 8x	166	105 1/2	42 1/2	44x3	51 1/2 x 5	51 1/2 x 5	1 1/2	30							
31	Own	P.Own	Own GRBA	A	4	No	Spl 3	Own 52	2F	R 11.7	58.4	Own 52	OPKX	224 21	Own 8x	166	105 1/2	42 1/2	44x3	51 1/2 x 5	51 1/2 x 5	1 1/2	31							
32	Per	D.B-L	B-L 60	U	4	A 4	No	Tim66704DH	WF	R 9.0	48.2	Tim 16700	L4IHV	TD	Ros	8x3 1/2 x 3 1/2	144	98 1/2	36	48x3	54x3	54x3	1 1/2	32						
5 1/2 Ton and more Con'd																														
33	Own	dp.Lon	Own B	A	12	A3	Spl	Tim 300W	4R	W	R 8.5	120	Own CL	T61A	720 TD	Ros	9x3 1/2 x 3 1/2	184 1/2	11 1/2	34 1/2	42 1/2 x 3 1/2	61x5	58x4	1 1/2	33					
34	Own	D.B-L	B-L 70	A	7	No	Spl 4	Tim 300W	4R	W	R 10.6	100	Tim 27450	T61A	720 TD	Ros	10 1/2 x 3 1/2 x 3 1/2	159 1/2	8 3/4	34 1/2	42 1/2 x 3 1/2	61x5	58x4	1 1/2	34					
35	Own	D.B-L	B-L	A	7	No	Spl 4	Tim	4R	WF	R 9.67	90.9	Shu	T4RIA	864 TD	Ros	8x3 1/2 x 3 1/2	216	129	36	40x3	54x4	58x4	1 1/2	35					
36	Chi	D.B-L	B-L 60Max	A	7	No	Spl 4	Tim 310	4R	WF	R 7.75	73.3	Tim 26450	TWRIA	796 TD	Ros	8x3 1/2 x 3 1/2	194	121	36	44x3 1/2	60x4	60x4	1 1/2	36					
37	Per	D.B-L	B-L 60	A	7	No	SplB4	Tim SW200H	4R	WF	R 7.75	71.2	Tim 26450H	L6IHV	674 TD	Ros	10x3 1/2 x 3 1/2	132 1/2	80 1/2	37	48x3	64x4	64x4	1 1/2	37					
38	Own	D.B-L	B-L 70	A	7	No	SplB4	TimSW300W	4R	WF	R 8.5	79.9	Tim 17300	T1A	490 TD	Ros	10x3 1/2 x 3 1/2	132 1/2	80 1/2	37	48x3	64x4	64x4	1 1/2	38					
39	Own	D.B-L	B-L 70	A	7	No	SplB4	TimSW400W	4R	WF	R 8.5	79.9	Tim 17300	T1A	490 TD	Ros	10x3 1/2 x 3 1/2	132 1/2	80 1/2	37	48x3	64x4	64x4	1 1/2	39					
40	G&O	D.Cov	B-L	A	7	No	SplP5	Tim SW200	4R	WF	H Opt	Opt	Shu 5582B	L6IHV	571 TD	Ros	6 1/2 x 3 1/2 x 3 1/2	P 162	103	34	45 1/2 x 2 1/2	58x4	58x4	1 1/2	40					
41	G&O	D.Cov	B-L 60Max	A	7	No	SplB5	Tim SW200	4R	WF	R Opt	Opt	Tim 16300	W841	238 TD	Ros	9x3 1/2 x 3 1/2	P 162	100 1/2	37	46x3	60x4	60x4	1 1/2	41					
42	G&O	D.B-L	B-L 70	A	7	No	SplB5	Tim SW300	4R	WF	R Opt	Opt	Tim 17300	W841	238 TD	Ros	9x3 1/2 x 3 1/2	P 141	93	37	46x3	60x4	60x4	1 1/2	42					
43	G&O	D.Cov	B-L 60Max	A	7	No	SplP5	Tim SW300	4R	WF	R Opt	Opt	Tim 17300	W841	238 TD	Ros	9x3 1/2 x 3 1/2	P 138 1/2	94 1/2	37	46x3	60x4	60x4	1 1/2	43					
44	Own	D.Ful	H-O-G	U	4	A 3	PeS6	Wis 8017	4R	WF	R 7.75	72.7	Shu 615	WFIMV	Opt	Ros	7 1/2 x 3 1/2 x 3 1/2	T 240	140	36	41x3	56x3 1/2	56x3 1/2	1 1/2	44					
45	Per	P.B&B	B-L554&60	A	7	A 3	PeS6	Tim Own	4R	WF	R 6.87	93.2	Tim 15000	T4RIA	Opt	Ros	8x3 1/2 x 3 1/2	C 192	114 1/2	33 1/2	41x3	46x3 1/2	46x3 1/2	1 1/2	45					
46	Per	P.B&B	B-L714&60	A	7	A 3	PeS6	Tim Own	4R	WF	R 6.87	123	Tim 17300	T4RIA	Opt	Ros	8x3 1/2 x 3 1/2	C 213 1/2	149 1/2	34 1/2	41 1/2 x 3	49 1/2 x 4	49 1/2 x 4	1 1/2	46					
47	Per	P.B&amp																												



## KEY OF REFERENCES

## GENERAL

Gross Vehicle Weight—Chassis weight, plus body and cab, plus pay load.  
Chassis Price is for truck with standard wheelbase listed and with tires listed F.O.B. factory, unless otherwise specified.

b—Price of Mack AC 7-10 ton, \$4,950, tires, 8 36x5, DS 40x5; 11-14 ton, \$5,500, tires, 8 36x6, DS 40x6; 15 ton, \$6,000, tires 8 36x7, DS 40x7.

## TIRES

B—Balloons.  
DB—Dual Balloons standard equipment.  
P—High Pressure Pneumatics standard equipment.  
DP—Dual High Pressure Pneumatics standard equipment.  
S—Solids.  
DS—Dual Solids.  
o—Pneumatics furnished at extra cost.

## ENGINE

## Make

Bud—Buda Company.  
Con—Continental Motors Corp.  
HaS—American Car & Fdy. Co.  
Her—Hercules Motor Corp.  
Lyc—Lycoming Motor Corp.  
Wau—Waukesha Motor Co.  
Wis—Wisconsin Motor Mfg. Co.

## Valve Arrangement

H—In head.  
L—"L" Head.  
S—Sleeve.  
T—"T" Head.

## Camshaft Drive

C—Chain.  
G—Gear.

## Piston Material

A—Aluminum alloy.  
B—Semi-steel.  
C—Cast iron.  
N—Nickel iron.  
S—Aluminum alloy with strut.

## Main Bearings

r—Rear main bearing.

## Oiling System

CC—Pressure to main, connecting rod and camshaft bearings.  
FP—Pressure to main, connecting rod, camshaft bearings and piston pins.  
PC—Pressure to mains and connecting rod bearings.  
PG—Pump, gravity and splash.  
PS—Pressure with splash.  
SP—Circulating with splash.

## Governor

Bf—Bethlehem Fabricators, Inc.  
Bu—Buda  
Co—Continental.  
Ha—Handy Governor Co.  
HS—Amer. Car & Fdy. Co.  
KP—Handy Governor Co.  
Mo—Monarch.  
No—Not supplied.  
On—Own.  
Op—Optional.  
Pe—Pierce Governor Co.  
Si—Simplex (Elsemann Magneto Corp.)  
St—Sterling.  
Wa—Waukesha.

## Radiator

Bus—Bush Mfg. Co.  
Chi—Chicago Mfg. Co.  
Fed—Feddars Mfg. Co.  
G&O—G & O Mfg. Co.  
Har—Harrison Rad. Corp.  
Hex—Hexcel Rad. Co.  
Lon—Long Mfg. Company.  
McC—McCord Rad. & Mfg. Co.  
Mod—Modine Mfg. Co.  
Per—Perfex Corp.  
R-T—Rome-Turney Rad. Co.  
You—Young Rad. Company.

FUEL SYSTEM  
Carburetor Make

Car—Carter Carburetor Co.  
Joh—Johnson.

Mar—Marvel Carburetor Co.  
Sch—Wheeler Schebler Co.  
Ste—Detroit Lubricator.  
Str—Stromberg Motor Dev. Co.  
Til—Tillotson Mfg. Co.  
Zen—Zenith-Detroit Corp.

## Fuel Feed

E—Electric Pump.  
G—Gravity.  
M—Mechanical Pump.  
P—Pressure.  
V—Vacuum.

## ELECTRICAL SYSTEMS

A—Bo—Amer. Bosch Magneto Co.  
R—Bo—Robert Bosch Magneto Co.  
Apo—Apollo Magneto Corp.  
D—R—Delco Remy Company.  
Eis—Elsemann Magneto Corp.  
L—N—Leeco-Neville Co.  
N—E—North East Elec. Co.  
Spl—Spitdorf Electrical Co.  
1—Generator and Starter at extra cost.  
2—Starter not supplied. Generator at extra cost.  
3—Starter at extra cost.

## CLUTCH

## Type

D—Multiple disk.  
dp—Double Plate.  
O—Plate in oil.  
P—Single plate.

## Make

B&B—Borg & Beck Co.  
B—L—Brown-Lipe Gear Co.  
Cla—Clark Equipment Co.  
Cov—Covert Gear Co.  
D—G—Detroit Gear & Mach. Co.  
Ful—Fuller & Sons Mfg. Co.  
H—S—Merchant & Evans Co.  
Jon—Jones Clutch & Gear Co.  
Lon—Long Mfg. Company.  
M—E—Merchant & Evans.  
M—M—Mechanics Mach. Co.  
Mun—Muncie Products Div. General Motors Corp.  
Roc—Rockford Drill Machine Co.  
W—G—Warner Gear Co.

## GEARSET

## Make and Model

B—L—Brown-Lipe Gear Co.  
Cla—Clark Equipment Co.  
Cov—Covert Gear Co.  
D—G—Detroit Gear & Mach. Co.  
Ful—Fuller & Sons Mfg. Co.  
M—M—Mechanics Mach. Co.  
Mun—Muncie Products Div. General Motors Corp.  
W—G—Warner Gear Co.  
War—Warner Corp.

## Location

A—Amidships.  
J—Unit with jackshaft.  
U—Unit with engine.

## Auxiliary, Location

No—Not furnished.  
Op—Optional at extra cost.  
A—Amidships.  
R—Rear of amidships main transmission.  
U—Unit with engine.

## UNIVERSAL JOINTS

Blo—Blood Bros. Mach. Co.  
B—C—Blood and Cleveland.  
Cle—Cleveland Steel Prod. Cor.  
Har—Spicer Mfg. Co.  
M—M—Mechanics Machine Co.  
PeS—Peters and Spicer.  
Pet—Peters.  
P—S—Peters and Sneed.  
S—C—Spicer and Cleveland.  
Spi—Spicer Mfg. Co.  
S—P—Superior Universal Products Co.  
SpB—Spicer and Blood Bros.  
SpP—Spicer and Pick.  
S—T—Spicer & Thermoid.  
U—M—Universal Machine Co.  
U—P—Universal Products Co.

## REAR AXLE

## Make

Cla—Clark Equip. Co.  
Col—Columbia Axle Co.  
Con—Continental Axle Co.  
Eat—Eaton Axle Co.  
Sal—Salisbury Axle Co.  
Tim—Timken Det. Axle Co.  
Wis—Wisconsin Axle Co.

## Final Drive and Type

B—Bevel.  
C—Chain.  
D—Dead.  
I—Internal Gear.  
2—Double Reduction.  
R—Relay—Pendulum Drive.  
S—Spiral Bevel.  
W—Worm.  
1/2—Semi-Floating.  
1/4—Three-Quarter Floating.  
F—Full Floating.

## Drive and Torque

A—Radius Rods and Torque Arm.  
H—Hotchkiss.  
R—Radius Rods.  
T—Torque Arm.  
U—Torque Tube.  
O—Radius Rods Optional.

## WHEELS DRIVEN

2—Forward pair of rear wheels.  
4F—Front and forward pair of rear wheels.  
4R—Four rear wheels.  
6—Six wheels.

## FRONT AXLE

## Make and Model

Shu—Shuler Axle Co., Inc.  
Cla—Clark Equipment Co.  
Col—Columbia Axle Co.  
Con—Continental Axle Co.  
Eat—Eaton Axle Co.  
Sal—Salisbury Axle Co.  
She—Sheldon.  
Tim—Timken Det. Axle Co.  
Wis—Wisconsin Axle Co.

## BRAKES—Service

## Make

B—Bendix.  
BE—Bendix front, Eaton rear.  
BO—Bendix front, Own rear.  
C—Columbia.  
K—Clark.  
L—Lockheed.  
LO—Lockheed front, Own rear.  
O—Own.  
OE—Own front, Eaton rear.  
OW—Own front, Wisconsin rear.  
S—Steeldraulic.  
T—Timken.  
W—Wisconsin.  
Ws—Westinghouse.

Y—Chevrolet utility model with dual 30x5 rear tires lists at \$545.00.

(X) General Motors Trucks. Gross vehicle weight indicated for each model in table is the *Straight Rating* (combined weight of chassis, body, equipment and payload) for which chassis is designed and guaranteed to satisfactorily operate under average conditions. The size of the tires used does not affect this Straight Rating, but to secure maximum tire mileage it is suggested that the total gross weight be limited to a "recommended gross weight" for each tire equipment (type number) based on tire capacity. Chassis prices vary with wheelbase and tire combinations. The range of "recommended gross weights," type numbers and resulting payload range (assuming nominal body allowance) for each model follow.

Note: Models T-15 to T-60 inclusive, as well as Models TX and WX, are available for Export only as coach chassis.

MODEL	RANGE OF RECOMMENDED GROSS WEIGHTS (LBS.)	TYPE NUMBERS	RANGE OF PAYLOAD (TONS)
T-11	3800	1001	1/2
T-15	4500 to 6500	1501 to 1708	1/2-1 1/2
T-17	5500 to 6500	1701 to 1708	1-1 1/2
T-19	6500 to 8500	2201 to 2223	1 1/2-2
T-25	6800 to 9000	2501 to 2518	1 1/2-2
T-26	8500 to 11000	261-1 to 2618-18	2-3
T-30	10000 to 12500	3201 to 3215	2-3
TX-186 1/2	14000	Export Coach	.....
WX-185	14500	Export Coach	.....
T-42	12000 to 15000	4201 to 4242	2 1/2-4
T-44	12000 to 16000	4401 to 4412	3-4 1/2
WX-215	17000	Export Coach	.....
T-51	16500 to 19000	511-1 to 517-13	4-5 1/2
T-55	16500 to 19000	551-1 to 557-13	4-5 1/2
T-60	18500 to 22000	6201 to 6218	5-6 1/2
T-61	19500 to 22000	611-1 to 619-8	5-6 1/2
T-82	19000 to 24000	8201 to 8212	5-7
T-85	22000 to 26000	851-1 to 858-8	5-7
T-90	22000 to 28000	9001 to 9007	5 to 7 1/2
T-95	28000 to 34000	951-1 to 955-8	7 1/2-10
T-96	28000 to 34000	961-1 to 965-8	7 1/2-10

## Location

2—Two Wheel.  
4—Four Wheel.  
6—Six Wheel.  
2/4—Two wheel brakes effective on all four wheels through driveshaft.  
F—Driveshaft effective on four wheels.  
J—Jackshaft.  
P—Propeller shaft.  
P/4—Propeller shaft effective on four wheels.  
r—Four rear wheels.

## Type

I—Internal.  
Y—Internal front and external rear.  
X—External.

## Method of Operation

A—Air.  
D—Hydraulic and mechanical.  
H—Hydraulic.  
M—Mechanical.  
V—Vacuum.

## BRAKES—Hand

## Location

C—Center of double propeller shaft.  
2—Rear wheels.  
4—Four wheels.  
R—Worm or bevel gear shaft.  
T—Transmission.  
F—Driveshaft.

## Type

D—Disk.  
I—Internal.  
X—External.  
Y—Internal front and external rear.

## STEERING GEAR

## Make

CAS—Columbus G. & P. Co.  
Gem—Gemmer Mfg. Co.  
Han—Hannum Mfg. Co.  
Jac—Saginaw Steering Gear Div. General Motors Corp.  
Lav—Hannum Mfg. Co.  
Ros—Ross Gear & Tool Co.  
Woh—Wohlrab Gear Co.

## FRAME

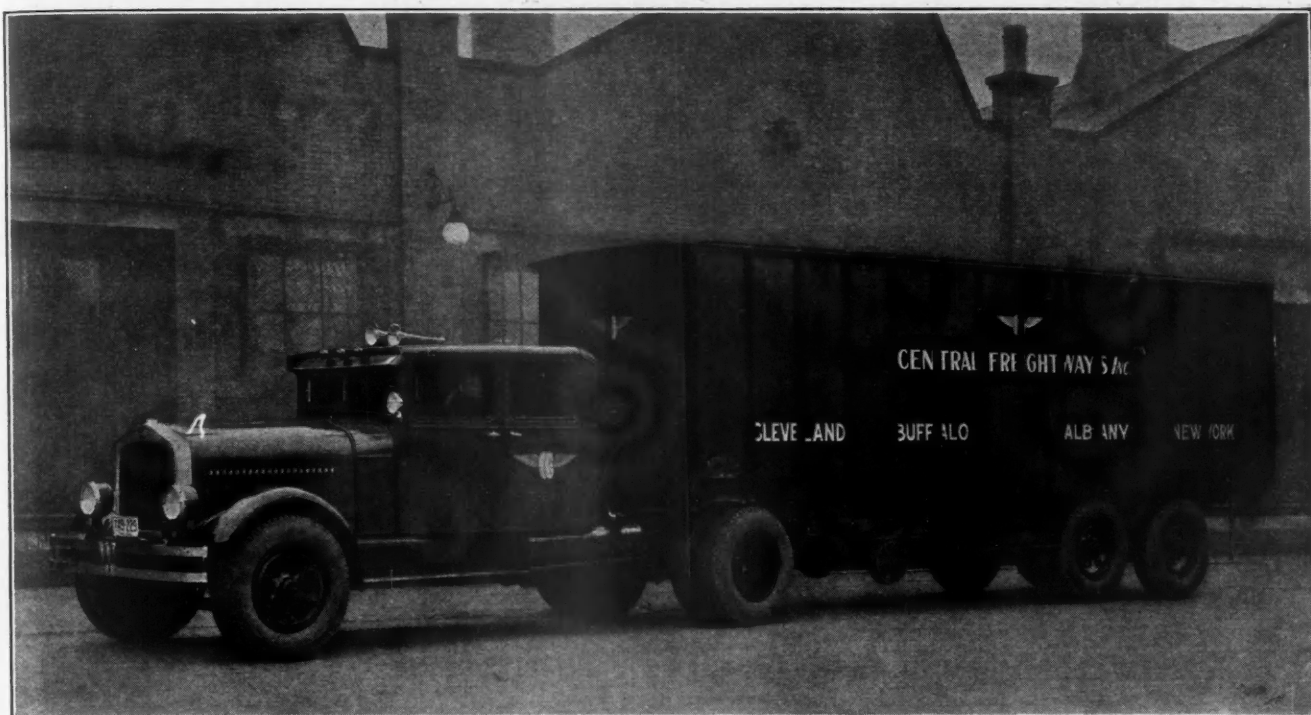
## Type

C—Channel.  
I—"I" Beam.  
P—Channel reinforced with plate.  
T—Side rails tapered front and rear.

## SPRINGS—Auxiliary

## Type

1/2—Semi-elliptic above or below main springs.  
1/4—Quarter elliptic.  
C—Coil spring.



## Dependable Special Equipment For Every Transportation Need

**T**HE dependability and reserve power of White Trucks make Whites exceptionally efficient transportation units for operation with special truck equipment.

With a wide range of truck and tractor models The White Company provides standard or special equipment to meet every possible need of motor transportation.

White engineers have developed a wide variety of power-operated, labor-saving devices—equipment that greatly in-

creases White Truck utility by enabling operators to speed up work and reduce costs.

White Trucks, with standard or special equipment, are serving dependably and economically every line of business—saving money for their owners. They will save money for you.

THE WHITE COMPANY, *Cleveland*

# WHITE TRUCKS

and White Busses



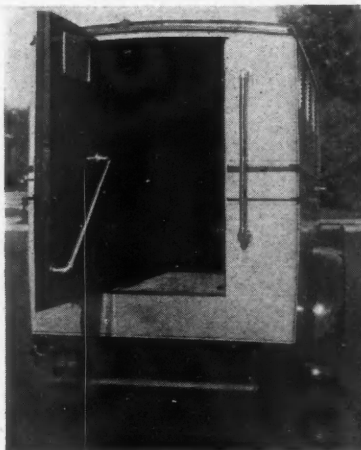
## SPECIAL BODIES

CONTINUED FROM PAGE 15

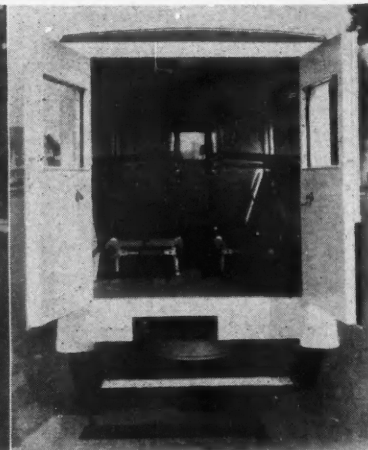
### Bibliography

For information regarding special bodies used in various miscellaneous vocations see the following articles:

- The Early Bird Gets the Huckster, Feb., 1929, page 22.  
 A New Idea in Delivery, Feb., 1929, page 21.  
 Airports—a New Truck Market, June, 1929, page 14.  
 Rack Bodies Ease Glass Deliveries, July, 1929, page 24.  
 Grocers Turn to Rolling Stores, Sept., 1929, page 30.  
 Women Give (Laundry) Body Ideas to Salesmen, Nov., 1929, page 22.  
 Sell Trucks for Sales Promotion, Dec., 1929, page 22.  
 The C.P.A. is a New Truck Prospect, Dec., 1929, page 18.  
 Libraries Fertile Field for Sales, Feb., 1930, page 27.  
 Truck Salesmen Can Do Crime Prevention Engineering (Armored Bodies), March, 1930, page 14.  
 Special Bodies for 42 Vocations, April, 1930, page 34.  
 Roadside Vendors Buy Trucks to Sell Truck, June, 1930, page 18.  
 Motor Trucks Help Jobbers Squeeze Out More Sales, March, 1931, page 26.



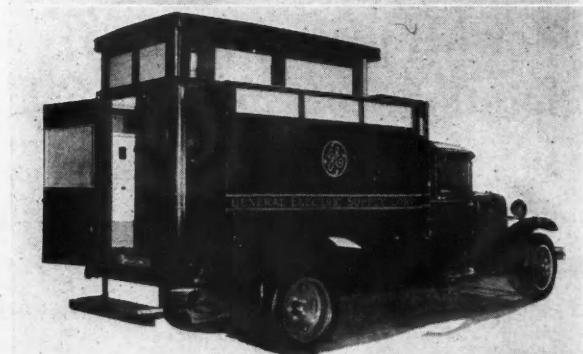
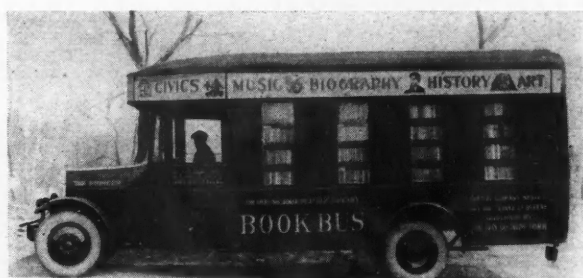
One-man police patrol on a light chassis. The offender is put inside alone and the rear door locked from the outside. Free riders are furnished ample ventilation by three louvered windows in each side. Seats are padded and covered with leather.



This light ambulance body is equipped with four stretchers, a folding seat and medicine and first-aid equipment. A sliding window between the driver's compartment and the interior makes communication between the driver and attendant possible.



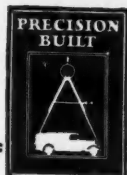
Top: This body equipped with a disappearing roof permits quick conversion from an open to closed type of body. Center: The entire floor of this body is moved by crank for discharging. It is made by the Principality Wagon Co., Ltd., Cardiff, Eng. Bottom: Light utility body for 1/2 and 3/4 ton chassis for minor installation and service work in telephone, electric, gas and water fields.



Top: Another type of library on wheels used by a municipality for the benefit of isolated citizenry. Other types are shown in the February, 1930, issue, page 27. Center: At destination the sides and ceiling of this demonstrating body are extended, forming a large display room. Bottom: The promotion of products by truck is quite popular today. Here is a kitchen on wheels used for demonstrating fuel.

# Here's Autocar Leading the Field again . . .

Business is making new demands on the motor truck industry. The warehouseman, the coal dealer, the freight hauler, the food distributor have all demanded better motor trucks. The Autocar Company has provided them. » » » Now the building supply dealers want a new type of truck. They want to supply transit-mixed concrete. There's money in it—if they can haul it economically. They want a truck with a frame as strong as a steel bridge, an engine as reliable as a jeweled watch. They want power. They want long life. Most of all, they want a truck that doesn't eat up all the profits. » » » They're getting what they want in the new Model C Autocars. A 3½-5 ton chassis, powered with the 101 h. p. Autocar Blue Streak 6-cylinder engine. A 9-inch channel steel frame. A wheelbase of 186 inches with power take-off from the transmission. The Autocar double-reduction rear axle. Adequate speed at all times under full load. And an economy of operation beyond their fondest hopes. » » » Autocar is leading the field again.



William H. Brant of West View, near Pittsburgh, Pa., owns this modern Autocar, designed and built especially to handle the heavy, rotating load of its transit-mixing body. He is one of a host of building materials dealers who are turning to Autocars for this type of work.

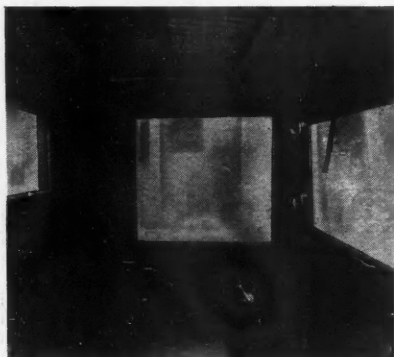
## AUTOCAR TRUCKS

THE AUTOCAR COMPANY, ARDMORE, PA.

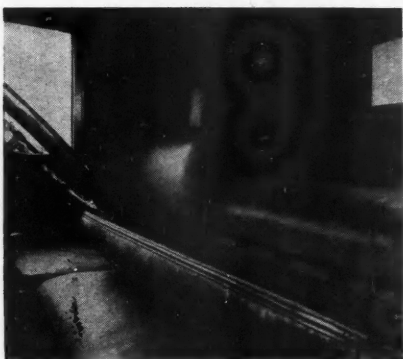


## CABS

CONTINUED FROM PAGE 29



Interior of Model S-1 Weatherproof coupe cab, showing comfortable appointments. The back wall, cushions and lazy-back are finished in artificial blue leather. Interior fittings include dome light, nickel controls and door pulls, and windshield wiper. Size is 38 to 42 x 54 in. Price, \$150



The sleeping compartment of this Weatherproof cab is located behind the driver's lazy-back. The berth is fitted with a spring cushion raised at one end to serve as a pillow. A 10 x 11-in. plate-glass window, sliding in felt channels is provided in the rear. Lazy-backs and seats are fitted with Fobami pads and upholstered in artificial leather



The dome of this Intercity van body is fitted with sleeping quarters for drivers. Access to the chamber is through a sliding door located in the cab ceiling. The compartment is fitted with one or two berths, lights and ventilators. Signal bells, controlled from cab, are frequently furnished in such berths

offered; some provide quarters in the overhead dome, others a berth-like shelf above the driver's seat and still others provide sleeping space behind the driver's seat. More details are given in the captions.

While the elements contributing to increased driver comfort have been given a lion's share of publicity, other essentials in cab designing have by no means been sacrificed. Materials entering into the modern cab, method of assembly and craftsmanship today are such as to give rugged durability and attractive appearance. The following summary of principal features will indicate briefly just what has been accomplished in this respect.

**Framework:** Built of rugged and strong material, generally wood, but also steel and aluminum, yet light and flexible. Both mitre and mortised joints are employed in wood frames as well as reinforcing angles and rods and lock nuts.

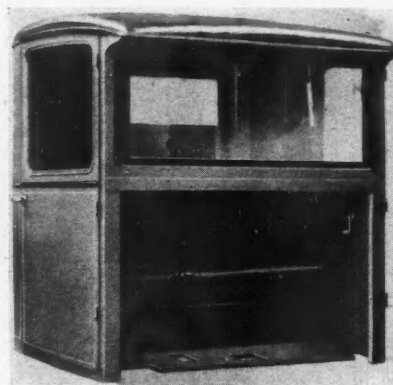
**Roofs:** Made of one or more pieces of material possessing both strength and lightness and shaped to secure crown and graceful contour effects. Assembly is firm against vibration and insulated against drumming and temperature.

**Doors:** While varying in design, size and construction, there is considerable evidence of attention having been given toward the prevention of sticking, binding and rattle. Weatherstripping is used to a large extent, assuring snug fits and elimination of drafts. Hardware is both rugged and attractive.

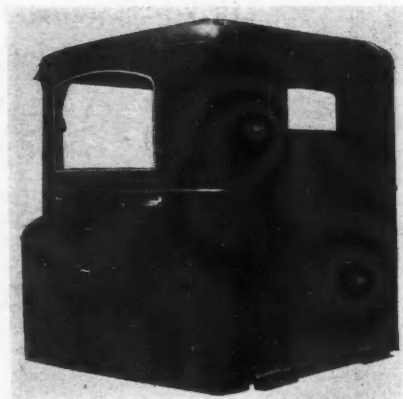
**Windows:** Also vary in size and structure. Design indicates effort to eliminate blind spots. Firm mounting of glass through the use of felt and rubber has rendered rattle an obsolete noise and penetration of rain remote. Controls for operating windows are both fast and attractive.

**Panels:** Whatever the material, grace of line and smoothness of finish are very noticeable today. Some jobs also have interior linings, thus providing an insulating air-space between walls. Drip mouldings encircling the roofs and absence of bolts or nuts on finished surfaces are notable improvements. Various materials are employed, including wood, and wood and metal laminated sheets, aluminum, sheet steel, etc.

**Mounting:** Three-point mounting to save the cab from frame twisting strains is quite common.



A three-passenger coupe-type truck cab offered by the U. S. Body & Forging Co. It is designed and fitted to follow passenger-car design. Interior appointments include upholstered spring cushions and lazy backs. Ternstedt window cranks and remote control door handles and automatic windshield wiper



Highland coupe cab. Its all-steel, insulated roof is made of three pieces. Panels are die stamped and joined to center panel with lock joints. The back panel is made up in the same manner. The interior is fitted with attractive appointments and upholstery. The driver's seat and lazy-back are adjustable independent of helper's seat



Metropolitan's Insulated couplex cab. The roof is a one-piece metal stamping, lined with a single section of wood to eliminate drum and serve as an insulant. An air pocket between inner and outer walls is another insulating feature of construction. Both seats and lazy-backs are adjustable. Cushions are pneumatic, with light springs

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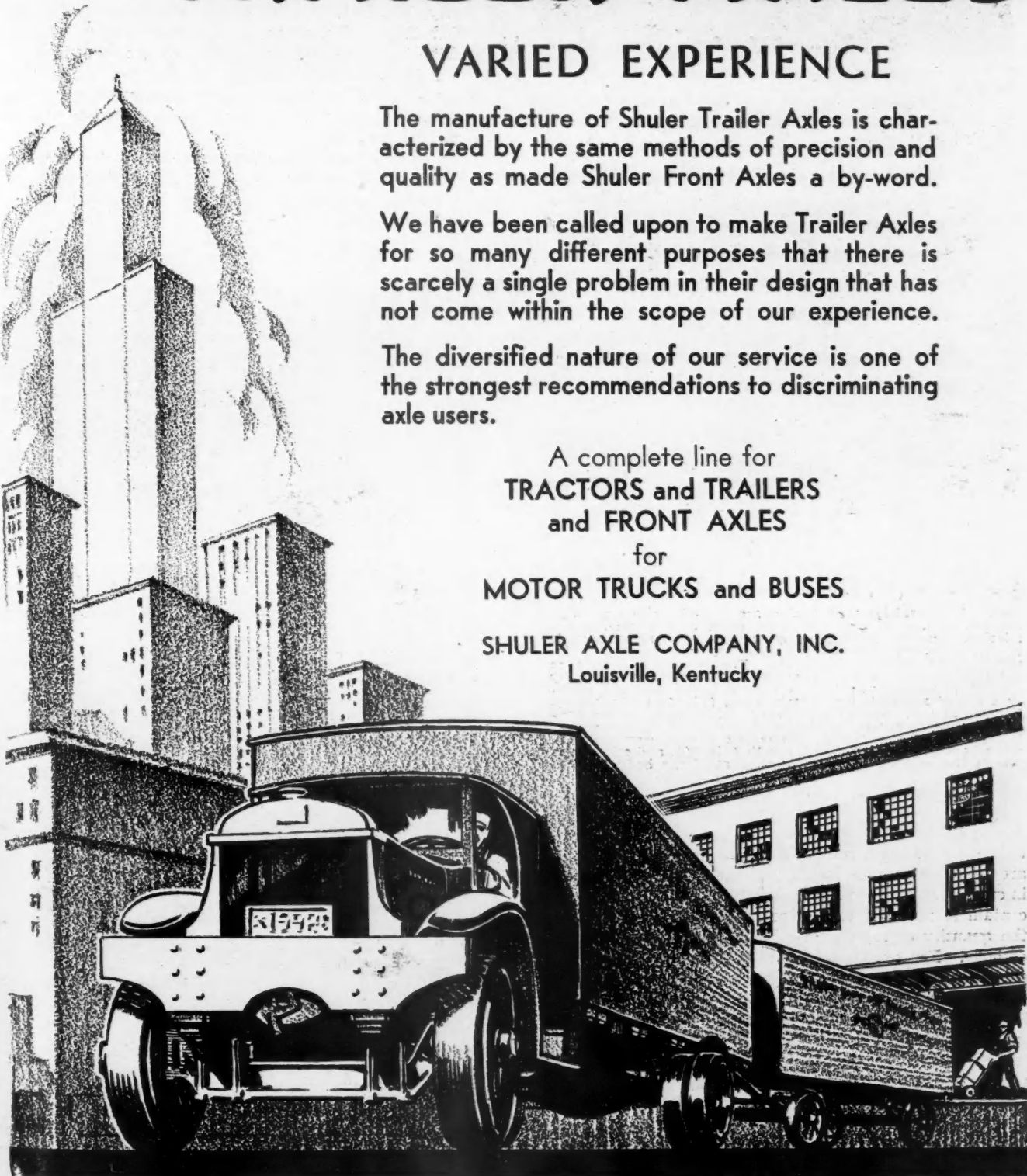
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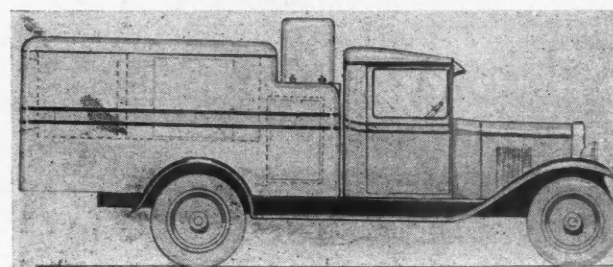
SHULER AXLE COMPANY, INC.  
Louisville, Kentucky





## REFRIGERATION

CONTINUED FROM PAGE 19



## Mechanical (11, 12, 13)

Mechanically refrigerated bodies are cooled by refrigerating units either from a gasoline power plant or the truck transmission. In the storage compartments, the refrigerant is expanded through expansion valves into continuous coils located on the ceiling, walls, etc. Thermostats are used to automatically control the temperature. The units are generally located immediately behind the cab, although they are sometimes placed alongside the chassis frame (Fig. 10 top, page 19). Designs of unit compartments vary considerably. Some conceal the compartment by making it a part of the body (Fig. 11), others build a special compartment equipped with side doors having louvers their full length (Fig. 12), and still others mount the unit on top and independent of the body (Fig. 13)

tainers. Containers are replaced when necessary. They are furnished in two shapes, triangular or rectangular in cross-section, and weigh about 10 lb. The number of containers required to refrigerate a body depends on the quantity of merchandise being carried and design of body. For example, in one body designed for ice-cream service six containers may be required to 90 gal. of ice-cream; 20 containers for 270 gal. in another body and 40 for 475 gal., depending on the size, shape and construction of both the body and its compartments.

While great progress has been made in the department of refrigeration, equally great, and just as important, progress has been made in insulation, both in the development of new and betterment of old materials and the method of application. As satisfactory refrigeration is mostly a matter of body insulation and

less a matter of use (opening doors, etc.) the value of insulation provided and its proper application governs the efficiency and economy of operation of cold truck bodies. But insulating materials must possess other qualities besides efficient insulating ability. Among the desirable characteristics are: light weight, low moisture absorption; freedom from cracking, settling and disintegrating, particularly in view of the severe jolting which bodies must withstand; sanitation; low cost, and ease of application. There are many good insulants on the market, choice in many instances depending on the nature of the job in which it is to be used, cost and availability. Among some of the better known insulants are Dry-Zero, a fibre from a tropical pod stitched between burlap; corkboard of varying density; Haircraft, sterilized hair between asphalt paper; Cabot'squilt, Eel grass between kraft paper; Hairfelt, felted cattle hair; Balsam Wool, wood fibres; Linofelt; flax fibre; Rock wool, Kapock; Thermofelt. The thermal conductivity and weight of these materials show considerable variation and must be considered in the design of the body.

Probably more attention is required in the selection of materials entering into the fabrication of a refrigerator body than any other type because construction

TURN TO PAGE 90, PLEASE

11

12

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14



15



16



## Miscellaneous (14, 15, 16)

Fig. 14—Dry-ice body designed for the installation of one or two insulated chambers, in the job illustrated the owner elected to use the rear for cracked ice for the accommodation of customers not having mechanical refrigeration.

Fig. 15—Light dry-ice combination unit for short emergency ice-cream hauls with a 200-gal. cold vault in front and an open express in the rear.

Fig. 16—A body designed for the optional use of either brine or dry-ice as refrigerant. Hatches are in the roof for cracked ice.

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## PARTIAL CONTENTS

Three classes of insulated bodies.

Three qualities of correct truck insulation.

Determining thickness of insulation.

Method of applying insulation.

Handling doors.

Sealing against water vapor.

Plans for post and belt rail construction including single course insulation.

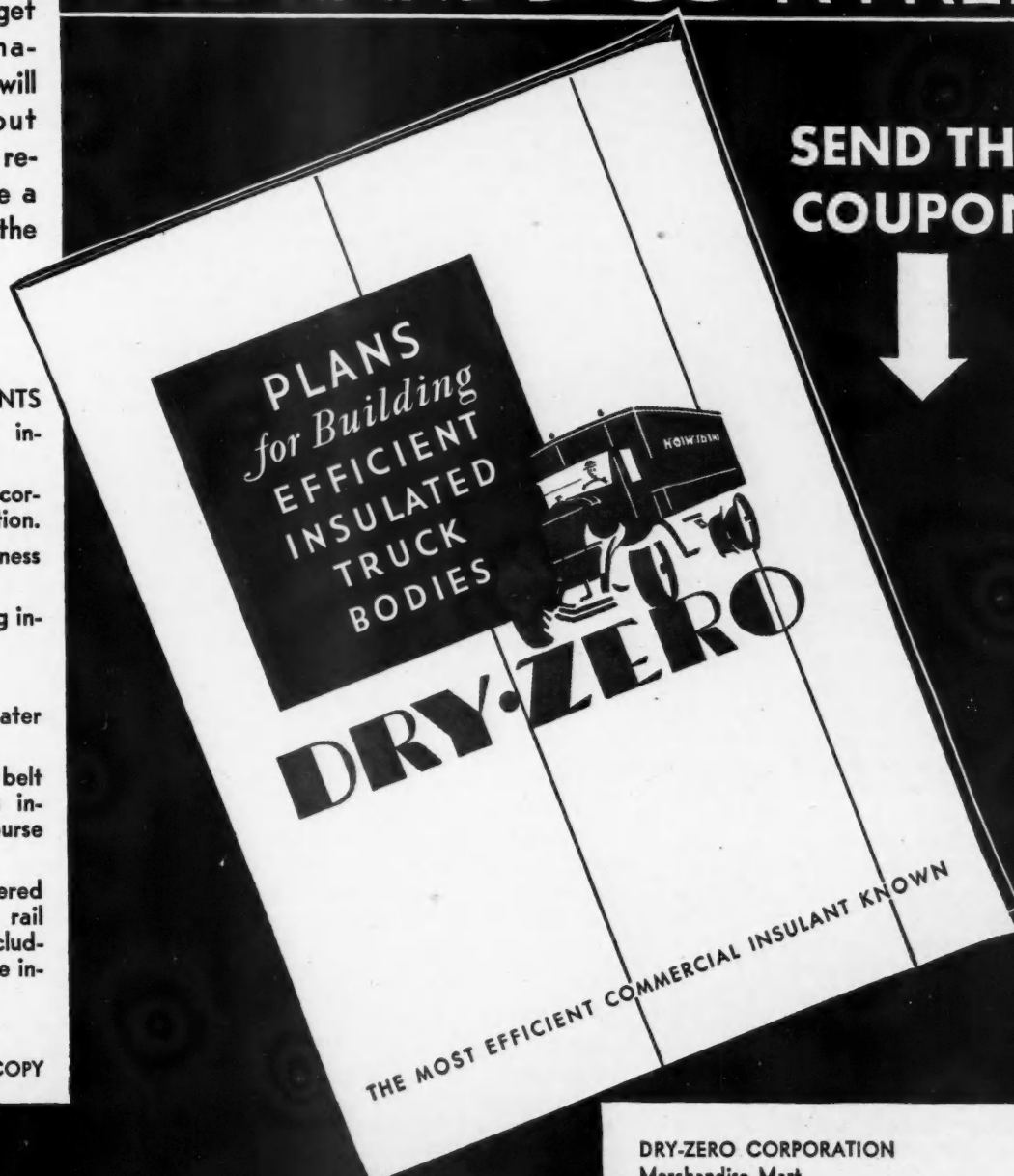
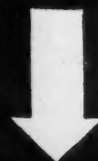
Plans for staggered post and belt rail construction including double course insulation.

Etc., etc.

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## Tailored Bodies Fit Any Need

CONTINUED FROM PAGE 14

driver and load; another wants equipment fitted for the efficient fighting of fire; a bottler desires to carry 144 cases of beverage attractively and for quick handling; the public demands special containers for the sanitary removal of rubbish; the manufacturer of light but bulky merchandise wants to use the full capacity of his truck; florists and furriers go for elegance and style, and so forth. These are special needs and require tailoring. The information of these pages is intended to help operators and salesmen help meet these needs.

## Trailers Beat Trail to Economy

CONTINUED FROM PAGE 60

drop frame is supplied. Drop frame semi-trailers are popular for carrying tanks for hauling gasoline.

Four-wheel trailers carry their loads independently of the tractor units. They are towed behind trucks or behind semi-trailers. Front wheels of four-wheel trailers are steered through the tow-pole track attached to the towing vehicle. Steering may be by yoked axles and steering knuckles, as on trucks, or by a fifth-wheel arrangement like that on wagons. Four-wheel trailers may be made reversible, that is, so that they may be steered from either end.

A semi-trailer can be converted into the equivalent of a four-wheel trailer by the use of a dolly placed under the front end in place of the fifth-wheel attachment on the rear of the tractor.

To increase carrying capacity of trailers, four wheels are placed under the rear of semi-trailers. These vehicles, with an addition of four-wheel dollies at the front, become eight-wheelers and when four wheels are used at the rear of what would ordinarily be called a four-wheel trailer, the unit becomes a six-wheeler.

Van type semi-trailers are being built with rounded front ends of the van body to reduce the space between the rear of cab of the tractor unit and the forward end of the body (Fig. 1). Both van body and tractor units are designed to blend together as much as possible. These are examples of tractor and semi-trailer combination which are not uncoupled and are operated as a single vehicle.

Brakes are desirable on wheels of semi-trailers and four-wheel trailers to enable the combination unit to maneuver in modern traffic. If a heavy semi-trailer, attached to a tractor unit, is going down a steep hill, it may

swing around to one side or the other by a procedure called "jack-knifing," if brakes on the tractor are applied hard or suddenly. To overcome this difficulty, it is necessary, of course, to have adequate brakes on the semi-trailer wheels. One type of brake is operated by the relative forward movement of the tractor, that is, movement of the semi-trailer toward the tractor when the brakes are applied on the tractor. A rod pushed back by the motion, actuates the brakes. Another way of applying brakes to a semi-trailer is to carry compressed air from the tractor to the semi-trailer when the tractor is equipped with air brakes. The same procedure can be followed with vacuum booster equipment, in which case an extra vacuum booster cylinder is mounted on the trailer to operate its brakes. The more recent development of semi-trailer, and four-wheel trailer brakes, is the electric brake. This brake is energized by electric current and forward motion of the vehicle provides additional force to apply the brakes.

## Rolling Stock Built Just for Live Stock

CONTINUED FROM PAGE 58

side as well as rear doors. The interiors of these bodies are built to make the journey of these expensive animals as easy and as comfortable as possible. Sides, stalls and bars are generally well padded and floors are so equipped to provide sure footing. Some also provide quarters for a keeper and space for water and food.

## More Vocations Go to Frigid Bodies

CONTINUED FROM PAGE 88

is necessarily large and reduction of weight to a minimum becomes an important factor. Consequently materials that contribute to lightness and at the same time do not detract from durability are highly desirable. Framework, roof, metal lining, panels and doors, all should be assembled with this viewpoint.

Considerable can be accomplished in this respect with paneling. Various materials are employed, among which are laminated sheets of wood and sheets of wood and metal, aluminum, light wood and in some cases sheet steel; the latter, however, is generally considered heavy. Laminated sheets besides reducing weight also possess greater stiffness and impact resistance than sheet steel of the same weight. Such sheets also are adapted to insulation purposes, are easily handled and take attractive finishes.

Hardware is another important consideration and should be selected from the standpoint of ease of application, serviceability and appearance. Hinges, door-locks, lugs and stirrups should be smooth acting, strong, assure positive opening and closing, and hold doors airtight under compression in practical everyday use. Chromium plating makes these parts attractive, especially against finishes in light colors.

## Road Work Paves Way for More Equipment

CONTINUED FROM PAGE 56

other problems that must be met if highways are to remain open in winter. The answer is equipment such as sweepers, road magnet sweepers, flushers, trash bodies, snow plows, chemical solvent distributors, sand spreaders, etc. Sweepers, for dirt and light snow, are driven by power taken from the truck.

Flushers, both gravity and pressure, are produced in capacities ranging from 300 to 1800 gal. for cleaning, dust-laying and oiling purposes. Gravity sprinklers depend on the weight of the water for discharge. Pressure flushers use engine-driven pumps.

Punctures occasioned by metal objects in the roads are rare on highways swept of nails and stray bits of steel and iron by high-voltage magnets. Equipment used in this service consists of a high-voltage generating plant installed in the truck and one or more magnets suspended from the truck frame high enough above the road surface to avoid ordinary protruberances. Sand spreaders are designed for the purpose of spreading sand or cinders on highways or streets when these are rendered unsafe by ice or snow. They are obtainable for direct mounting on the truck or as a separate installation unit. The latter, illustrated, embodies a hopper, a screw conveyor operating in a trough at the bottom of the hopper and driven by an independent engine and flat disk spreader driven by bevel gears at about 100 r.p.m.

There are many types and sizes of snow plows, varying in construction, method of operation and point of location on the truck. There are two general types, blade and rotary. Blade types are furnished with single or two blades, the latter are shaped in the form of a V and available with fixed or adjustable extension side wings. Rotary plows vary in design and construction. Some employ a cutting fan and exhaust method, which cuts into the snow, sucks the broken particles through a tube and discharges them like a blast to the side.